SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)		1. SOLICITATION NO. 2. T X X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y		YPE OF SOLICITATION  SEALED BID (IFB)  NEGOTIATED (RFP)		3. DATE ISSUED 27-Feb-2004	PAGE OF PAGES  1 OF 103		
IMPORTANT - The "offer" section	on the revers	e must be fully completed	I by offeror.						
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST SEE SCHEDULE			NO.		6. PROJECT NO.	). PROJECT NO.		
7. ISSUED BY	CODE	W911RX	8	3. ADDF	RESS OFFER TO	(If Other Than Item 7)	CODE		
ACA FORT RILEY DIRECTORATE OF CONTRACTING 802 MARSHALL DRIVE PO BOX 2248 FORT RILEY KS 66442-0248				Sec	e Item 7				
TEL: 785-239-6441	FAX	FAX: 785-239-3085				FAX:			
9. FOR INFORMATION	A. NAME				B. TELEPHONE NO.	(Include area code) (NO COLLECT CALLS)			
CALL:	WILFREDO DI	ELATORRE			785-239-0479				
			SOLICITA	TION					
NOTE: In sealed bid solicitation	ns "offer" an	d "offeror" mean "bid" a	nd "bidder".						
10. THE GOVERNMENT REQUIRE	S PERFORMA	NCE OF THE WORK DESC	CRIBED IN THE	SE DOC	CUMENTS	(Title, identifying	no., date):		
Project Title: Paint (Coat) and Repair Water Storage Tank 5200, Fort Riley, KS 66442  1. Estimated construction project is between \$100,000 to \$500,000. 2. Complete Section K and return with your bid. 3. Bidders will insert their Commercial Activity Government Entity (CAGE) Code in Block# 14. 3. Bidders must be registered with Central Contractor Registration (CCR).  Reminder: Failure of a prospective bidder to submit a signed certificate in Section K, Provision 52.203-8, Requirement for Certificate of Procurement Integrity with it's bid shall render the bid non-responsive.  11. The Contractor shall begin performance within 10 calendar days and complete it within 180 calendar days after receiving									
11. The Contractor shall begin performance within 10 calendar days and complete it within 180 calendar days after receiving award, X notice to proceed. This performance period is X mandatory, negotiable. (See 52.211-10 .)									
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS?  (If "YES," indicate within how many calendar days after award in Item 12B.)  X YES NO									
A. Sealed offers in original andlocal time30 Mar 2004shall be marked to show the off B. An offer guarantee X is, C. All offers are subject to the (1) w. D. Offers providing less than	(date). If eror's name an is not reork requiremen	copies to perform the wo this is a sealed bid solicitation d address, the solicitation n quired.	on, offers must bumber, and the o	date and	cly opened at that tim d time offers are due.	e. Sealed en	02:00 PM (hour) nvelopes containing offers		

NSN 7540-01-155-3212

SOLICITATION, OFFER, AND AWARD (Continued)											
				•	n, Alteration, o	<u> </u>					
					(Must be fully	Must be fully completed by offeror)					
14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)					15. TELEPHONE NO. (Include area code)						
					16. REMITTANCE ADDRESS (Include only if different than Item 14)						
					See Item 14	ļ.					
0005	l e	A O II ITY O O F	NF		_						
CODE FACILITY CODE											
17. The offeror agrees to accepted by the Government						ith the terms of		if this offer is y number equal	to or areater th	an	
	•			•		the minimum in	, ,	y mamber equal	to or greater th	un	
the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)											
AMOUNTS SEE SCHEDULE OF PRICES											
18. The offeror agrees to	furnish any r	equired perfo	ormance and payr	ment bonds.							
19. ACKNOWLEDGMENT OF AMENDMENTS											
			(The offeror acknowle	edges receipt of amend	ments to the solicita	tion give number	and date of each)				
AMENDMENT NO.											
DATE											
20A. NAME AND TITLE CONTROL (Type or print)		AUTHORIZE	D TO SIGN		20B. SIGNATURE 20C. OFFER DATE						
			AW	ARD (To be com	pleted by Gove	rnment)					
21. ITEMS ACCEPTED:											
22. AMOUNT		23 ACCOUN	NTING AND APPI	ROPRIATION DATA	Α						
22.7		20.7.0000.			•						
24. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM					25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO						
(4 copies unless otherwise specified)				10 U.S.C. 2304(c) 41 U.S.C. 253(c)							
26. ADMINISTERED BY CODE				27. PAYMENT WILL BE MADE BY: CODE							
CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE											
28. NEGOTIATED AGREEMENT (Contractor is required to sign this 29. AWARD (Contractor is not required to sign this document.)											
· · · · · · · · · · · · · · · · · · ·						Your offer on this solicitation, is hereby accepted as to the items listed. This award con- summates the contract, which consists of (a) the Government solicitation and					
to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this				your offer, and (b) this contract award. No further contractual document is							
contract. The rights and obligations of the parties to this contract shall be					necessary.						
governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by refer-											
ence in or attached to this cont		nis or incorporat	ed by relei-								
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)				31A. NAME	31A. NAME OF CONTRACTING OFFICER (Type or print)						
COD CIONATURE				TEL:	TEL: EMAIL:						
30B. SIGNATURE 30C. DATE			31B. UNITED STATES OF AMERICA 31C. AWARD DATE								
					BY BY	020 01			3.3.7.		

NSN 7540-01-155-3212 STANDARD FORM 1442 BACK (REV. 4-85)

### Section B - Supplies or Services and Prices

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT

0001 1 Lump Sum

Paint (Coat) and Repair Water Storage Tank 5200 SEE SECTION C: Descriptions and Specifications.

NAICS: 238320

To see complete Solicitation (IFB), please go to the weblink provided below.

http://www.riley.army.mil/Services/Fort/Contracting.asp

PURCHASE REQUEST NUMBER: DDFAES-4035-N006

Contract Type: FFP

FOB: Destination

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT

0002 1 Each

Performance and Payment Bonds

Paint (Coat) and Repair Water Storage Tank 5200

PURCHASE REQUEST NUMBER: DDFAES-4035-N006-0001

Contract Type: FFP

FOB: Destination

Section C - Descriptions and Specifications

### **SPECIFICATIONS**

# SPECIFICATIONS FOR PAINT (COAT) AND REPAIR WATER STORAGE TANK 5200 FORT RILEY, KANSAS 66442

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1		GENERAL REQUIREMENTS
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2	02050 02082	SITE WORK Demolition Lead-Based Paint Removal and Disposal For Exterior Metal Structures
3		CONCRETE (NOT USED)
4		MASONRY (NOT USED)
5	05500	METALS Metal Fabrications
6		WOOD AND PLASTIC (NOT USED)
7		THERMAL AND MOISTURE PROTECTION (NOT USED)
8		DOORS AND WINDOWS (NOT USED)
9	09913 09940	FINISHES Piping and Miscellaneous Metals Coating Coating Elevated Steel Water-Storage Tank
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13		SPECIAL CONSTRUCTION (NOT USED)
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16	16641	ELECTRICAL Cathodic Protection (Steel Water Tanks)

A EXHIBIT 1)

# APPENDIX A (SEE TECHNICAL

Drawings (Plans & Elevations)

B EXHIBIT 2)

## APPENDIX B (SEE TECHNICAL

Certificate of Analysis for Preabatement Soil Samples. Certificate of Analysis for Preabatement Paint Samples.

### **DIVISION 1 - GENERAL REQUIREMENTS**

### SECTION 01010

### SUMMARY OF WORK

### PART 1 GENERAL

- **1.1 SCOPE:** The project consists of furnishing all plant, labor, equipment, materials, and transportation, and performing all required work in accordance with the plans and specifications for paint removal and coating of and minor repairs to the interior and exterior of Elevated Water Storage Tank 5200.
- **1.2 LOCATION:** The site of the required work is Custer Hill Troop Area, Fort Riley, Kansas.
- **1.3 PRINCIPAL FEATURES:** The required work includes the principal features listed below. The outline of principal features does not limit the responsibility of the Contractor to furnish all plant, labor, equipment, materials, and transportation and perform all work required by the plans and specifications.

### 1.3.1 Water Storage Facility 5200 (500,000 gallon elevated tank):

- **1.3.1.1** Near-white metal blast clean existing mill scale, rust and coating from all interior surfaces of the metal water storage tank.
- **1.3.1.2** Coat all previously coated interior surfaces of the metal water storage tank with a two-coat, two component epoxy coating system.
- **1.3.1.3** Commercial blast cleans existing mill scale, rust and coating from the exterior surfaces of the metal water storage tank and all attached items.
- **1.3.1.4** Coat all previously painted exterior surfaces of the metal water storage tank with a three-coat system consisting of a first coat and an intermediate coat of a two-component epoxy and a finish coat of a two-component aliphatic polyurethane coating.
- 1.3.1.5 Clean and coat valve pit lid, frame, valves and piping.
- **1.3.1.6** Inspect and make repairs to the existing cathodic protection system.
- **1.3.1.7** Disinfect the water storage tank.
- **1.3.1.8** Replace missing bolts on the inside tank ladder.
- **1.3.1.9** Replace bulbs in all lights and repair any defective light fixtures.
- **1.3.1.10** Weld handhold covers on roof to eliminate slipping of the covers.
- **1.3.1.11** Remove existing manway on the riser pipe and install a new 30-inch diameter manway including new hatch.
- 1.3.1.12 Install inside safety grate at the top of the riser in accordance with OSHA regulations.
- **1.3.2** <u>Preabatement Paint Samples</u>: The Certificate of Analysis of the existing paint coatings on the water tower and within the valve pit is included in Appendix B. All of the samples taken contained detectable amounts of lead.

- **1.3.3** Maintain work area in a neat, orderly and safe condition during the course of the work, and clean up work area at the end of each workday and upon completion of the work. Dispose of debris and salvageable items as specified in SECTION 02050, DEMOLITION.
- **1.3.4** Prepare, maintain, and submit as-built drawings as required.
- **1.4 APPLICABLE PUBLICATIONS:** The US Army Corps of Engineers Manual (EM) listed below forms a part of this section to the extent referenced. The publication is referred to in the text by basic designation only. The publication shall be assumed to be the most current edition in effect at the time a contract is awarded.
- EM 385-1-1 General Safety and Health Requirements.

### 1.5 GENERAL REQUIREMENTS:

- **1.5.1** <u>Verification of Conditions and Dimensions</u>: The Contractor shall review plans and specifications and visit the work site to become thoroughly familiar with details of the required work and site conditions, verify all dimensions prior to ordering materials and fabricating components, and notify the Contracting Officer of any discrepancies between the plans and specifications and actual conditions. All discrepancies shall be resolved before the Contractor begins work. The Contractor shall verify actual conditions and dimensions in comparison to the plans and specifications prior to submitting its bid.
- **1.5.2** <u>Delivery and Storage</u>: The Contractor or its suppliers shall deliver materials to the work site in undamaged, unopened manufacturer's standard packaging or containers. The Contractor shall store materials to protect them from physical damage, theft, vandalism, and weather.
- **1.5.3** <u>Marking and Labeling</u>: Manufacturer's standard packaging and containers, or when appropriate, individual pieces of material shall be marked or labeled showing the name of the manufacturer; brand name; model number, stock number, or other designations; item description; and when applicable, the stamp of a nationally recognized, independent testing laboratory or agency, certifying materials conform to the requirements specified.
- **1.5.4 Proprietary Products:** Unless otherwise specified, proprietary products indicated in the specifications or noted on the plans are intended to establish capacities, color, design, features, pattern, quality, and style of materials desired, and is not intended to limit trade. Materials proposed for use, which can be determined by the Contracting Officer to conform to the requirements, specified, may be substituted and installed after his approval.
- **1.5.5** <u>Identification Cards</u>: All Contractor and Subcontractor personnel shall wear identification cards while working at Fort Riley. Identification cards shall show a photograph of the employee; name of employee; and name, address, and phone number of the Contractor or Subcontractor.
- **1.5.6** <u>Vehicle Identification</u>: All Contractor and Subcontractor vehicles and equipment shall bear the Contractor or Subcontractor's name while the vehicles and equipment are working at Fort Riley. Names shall be applied to both sides of vehicles and equipment as a minimum.

### **1.6 PROTECTION:**

**1.6.1** Safety Requirements: The Contractor shall take safety precautions to protect workmen, building occupants, and the public from construction equipment and materials being removed and installed at the work site. The Contractor shall maintain free and safe passage into and out of adjoining or adjacent building and areas not part of this project. The Contractor shall comply with EM 385-1-1 while performing the required work in this project. If the Contractor fails, or refuses, to promptly comply with safety requirements, the COR may issue an order stopping part or all of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop order shall be made the subject of claim for extension of time or for excess costs or damages to the Contractor.

- **1.6.1.1** Accident Prevention Plan: The Contractor shall submit an Accident Prevention Plan as discussed in Paragraphs 01.A.07, 01.A.08 and Appendix A of EM 385-1-1 to the Contracting Officer for approval at or before the Pre-construction Conference. The Contractor shall not commence work on this contract without an approved Accident Prevention Plan. The Accident Prevention Plan shall include a description of the work activity, probable hazards related to the work, and positive precautionary measures to be taken to safeguard against and to reduce or eliminate each particular hazard.
- **1.6.2 Protection of Property:** All property, including buildings, site improvements, utilities, and vegetation at or adjacent to the work site, and which might be damaged during the course of the required work, shall be adequately protected by the Contractor for the duration of the work. The Contractor shall not operate heavy construction equipment on drives, sidewalks, or lawns without installing suitable protection on these surfaces.
- **1.6.3** <u>Barricades, Warning Signs, and Lights</u>: The Contractor shall install all necessary barricades, warning signs, and lights to protect workers, building occupants, the public, and adjacent property.
- **1.6.4** Confined Space: Work performed in this contract on the Valve Pit shown in Appendix A, shall be considered work in a confined space. This area is not designed for continuous occupation, and therefore is a confined space, in accordance with 29 CFR 1910.146. The Contractor shall be required to certify that all personnel involved with this task have received the proper training and have a written Standard Operating Procedures (SOP) on Confined Space. The determination of whether or not the valve pit will be classified as a permitted or non-permitted will be determined in accordance with 29 CFR 1910.146 standards.
- **1.7 COORDINATION REQUIRED:** The facilities are secured at all times, and the Contractor's operations shall be coordinated with Public Works, Maintenance Division for access to the facilities. This coordination shall be in the form of written notification and be delivered, in person, to Maintenance Division, Bldg 337, not less than 7 calendar days prior to commencement of work. Copies of the written notification shall be submitted to the COR and the Contracting Officer.
- **1.8 WORKING HOURS:** Once begun, work shall continue uninterrupted during normal working hours until it is complete. The Contractor shall schedule its working hours to coincide with working hours of the military installation. Normal work hours are from 7:30 a.m. to 4:30 p.m., Monday thru Friday, Federal holidays excepted. The Contractor shall not perform work on the installation on other days or other hours without the written approval of the Contracting Officer. The Federal holidays listed below are observed. When a holiday falls on a Sunday, the following Monday will be observed as the holiday. When the holiday falls on a Saturday, the preceding Friday will be observed as the holiday. Contractors are also requested to not schedule work on Christmas Eve and New Year's Eve.

New Year's Day
Martin Luther King's Birthday
Presidents' Day
Memorial Day
Independence Day

Labor Day
Columbus Day
Veterans' Day
Thanksgiving Day
Christmas Day

- **1.9 QUALITY CONTROL:** The Contractor shall develop, implement, and maintain a quality control system, which meets or exceeds the requirements of SECTION 01440: CONSTRUCTION QUALITY MANAGEMENT CONTRACTOR QUALITY CONTROL.
- **1.10 AS-BUILT DRAWINGS**: When required in the various sections of the specifications, as-built drawings shall be prepared and submitted by the Contractor. One (1) reproducible set (on Mylar) of all requested as-built drawings shall be submitted to the Contracting Officer prior to final payment on the project. Existing as-built drawings are available for most buildings at the Engineering Services Division, Public Works, 408 Pershing Court, Fort Riley, KS.
- **1.11 WARRANTY OF CONSTRUCTION:** The Contractor shall warrant its construction in accordance with Contract Clause FAR 52.246-0021 entitled: Warranty of Construction.

- **1.12 DISCONNECTION AND RECONNECTION OF ELECTRICAL SERVICES:** When the required work presents a fire hazard, the Contractor shall comply with the requirements listed below. Disconnection, reconnection, and operational checks shall be performed by workers qualified to accomplish the tasks.
- **1.12.1** <u>Electrical Service</u>: When a fire hazard exists or is about to exist, electrical service to the facility shall be shut off at the main distribution panel prior to commencing work. After the fire hazard has been eliminated, the electrical services shall be turned back on.
- **1.13 INTERRUPTION OF SERVICES:** If the project requires interruption of utility services to the facilities, the Contractor shall coordinate the interruption with Maintenance Division, Public Works and obtain written approval from the Contracting Officer. Unless otherwise specified, the Contractor shall provide temporary electrical service to the facilities when the required work cannot be accomplished in one workday.
- **1.14 ADDITIONAL INFORMATION:** Publications referenced in the specifications are the Contractor's responsibility to procure. As-built drawings for most buildings and facilities are available for review at the Engineering Services Division, Public Works, Building 408, Fort Riley, KS. Applicable Fort Riley Regulations governing lead-based paint (LBP) procedures can be obtained at the Directorate of Environment and Safety (DES), Building 407, Fort Riley, KS.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

### **DIVISION 1 - GENERAL REQUIREMENTS**

### SECTION 01300

### **SUBMITTALS**

### PART 1 GENERAL

- **1.1 SCOPE:** This section provides a summary of submittals, which are required in various sections of the specifications, and is provided for the convenience of the Contractor and the Government in the administration of the Contract. Any omission of a submittal in this summary, but required elsewhere in the specifications, shall not relieve the Contractor of the responsibility of furnishing the requested submittal.
- **1.2 DEFINITION:** The term "submittal" includes, but is not limited to: catalog cuts and samples; certificates of compliance; certified lists of major equipment and materials; installation, application, and finishing instructions; keying schedules; manufacturer's descriptive literature; operation and maintenance instructions; repair parts lists; shop drawings; test reports and results; batch and weigh tickets; applications for authorizations or permits; and other related information to be furnished by the Contractor to describe, in detail, specific portions of the work and materials required by the plans and specifications.
- **1.2.1** Certified Lists of Materials: Certified lists of major materials shall include names of manufacturers; brand names, model numbers, stock numbers, or other designations; item descriptions; cross-references to applicable publications; and certification by manufacturers that materials being supplied meet or exceed the requirements specified. Current, dated manufacturer's descriptive literature sufficient to determine conformance with the requirements specified may be submitted in lieu of written certification by manufacturers.
- **1.2.2** <u>Installation Instructions</u>: Manufacturer's written installation, application and finishing instructions required in various sections of the specifications includes all installation, application and finishing instructions, recommendations, suggestions, and guidance whether published separately, noted on the manufacturer's shop drawings, or printed on the product or its packaging.
- **1.2.3** Samples: Samples of materials proposed for use in the project shall be furnished to the Contracting Officer, if requested.
- **1.2.4** <u>Test Reports</u>: Test reports or other technical analyses demonstrating that materials proposed for use in the project conform to the requirements specified shall be furnished to the Contracting Officer, if requested.
- **1.2.5** Applications for DA Radiation Authorizations or Permits: The Contractor or his testing laboratory shall not operate any testing equipment utilizing a radiation source without obtaining a Radiation Permit from the Fort Riley Radiation Protection Officer. The Contractor shall prepare and submit DA Form 3337, Application for Department of the Army Radiation Authorization or Permit, 30 days prior to use of radiation source testing equipment.
- **1.3 GENERAL:** Submittals shall be adequate, in themselves, to determine conformance with the Contract plans and specifications. Certificates of compliance submitted shall be notarized. The Contractor shall coordinate all submittals and review them for accuracy, completeness, and compliance with contract requirements, and indicate his approval thereon as evidence of such coordination and review. Submittals submitted to the Contracting Officer without evidence of the Contractor's approval will be returned without action for resubmission. The Contracting Officer shall indicate approval or disapproval of the submittals; if not approved as submitted, the Contracting Officer will indicate the reason(s) for disapproval. Any materials for which a submittal is required shall not be purchased or incorporated into the work without prior submittal approval. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in shop drawings, nor from responsibility for

complying with the requirements of this Contract, except with respect to variations described and approved in compliance with the following paragraph.

**1.4 VARIATIONS:** If submittals show variations from the Contract requirements, the Contractor shall describe the variations in writing, separate from the basic submittal document, at the time of submission.

### PART 2 PRODUCTS (NOT USED)

### PART 3 EXECUTION

### 3.1 SUBMITTAL SUBMISSION:

- **3.1.1** Where to Submit: Submission of submittals shall be to the Contracting Officer, Directorate of Contracting, Building 802 Marshall Drive, P.O. Box 2248, Fort Riley, Kansas 66442-0248.
- **3.1.2** When to Submit: All submittals for a project, with the exception of the Accident Prevention Plan and Quality Control Plan, shall be completed and submitted at one time within 10 days after receipt of the Notice to Proceed. The Contracting Officer may, at the request of the Contractor, waive the 10 day submission requirement for materials, that will not be incorporated into the work until a later date. The Contractor shall submit the Accident Prevention Plan and Quality Control Plan by the Preconstruction Conference. The Notice to Proceed will not be issued until the plans have been approved by the Government. The approved plans shall be implemented not later than the contract start date. The Contractor shall resubmit the plans within 5 working days prior to any proposed changes in the plans.
- **3.1.3** What to Submit: All submittals shall be accompanied by properly filled out ENG Form 4025-R, Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificates of Compliance and ENG Form 4288-R, Submittal Register. Copies of both forms are available from the Contracting Officer. Submittals shall be grouped together by division of work and submitted on one Material Approval Submittal Form for each division. The Contractor shall submit for approval four (4) copies of all submittals except physical samples of materials and applications for DA Radiation Authorizations or Permits. Only one item of a physical material sample is required for submission. Eight (8) copies of DA Form 3337, Application for DA Radiation Authorization or Permit shall be submitted. The Contracting Officer will retain Three (3) sets of submittals and one (1) set shall be returned to the Contractor. The Contracting Officer will retain the one (1) physical material sample submitted unless stated otherwise.
- **3.2 AS BUILT DRAWINGS SUBMISSION:** When required in the various sections of the specifications, as built drawings shall be prepared and submitted by the Contractor. One (1) reproducible set (on Mylar) of all requested as built drawings shall be submitted to the Contracting Officer prior to final payment on the project. Existing as built drawings are available for most buildings at the Engineering Services Division, Public Works, Building 408, Fort Riley.
- **3.3 SUBMITTAL SUMMARY:** Submittals required by various sections of the specifications are summarized as follows:

Referenced Section and Paragraph	Description of Submittal
Section 01010, Paragraph 1.6.1.1	Accident Prevention Plan.
Section 01440, Paragraph 1.3	Quality Control Plan, Quality Control Reports.
Section 02050, Paragraph 1.3	Receipts, DD Forms 1348-1A.

Section 02082, Paragraph 1.3 Permits and Notifications, Lead-Based Paint (LBP) Removal and Disposal Plan, List of Materials, List of Equipment, Test Results, Proof of Participation and Accreditation, Proof of License and/or Registration, Proof of Employee Training and Medical Examinations, Proof of Disposal. Section 05500, Paragraph 1.3 List of Materials, Installation Instructions, Shop Drawings. Section 09913, Paragraph 1.3 List of Materials, Samples, Application Instructions Section 09940, Paragraph 1.3 List of Materials, Samples, Application Instructions. Paragraph 2.4 Test Reports or Certificates of Compliance for Quality Assurance. Section 16641, Paragraph 1.3 List of Materials, Installation Instructions, Shop Drawings, As-Built Drawings, Test Results, Certification of the Corrosion Engineer or Technician.

### **DIVISION 1 - GENERAL REQUIREMENTS**

### **SECTION 01440**

# CONSTRUCTION QUALITY MANAGEMENT CONTRACTOR QUALITY CONTROL

### PART 1 GENERAL

- 1.1 SCOPE: This section sets forth requirements for construction quality management contractor quality control.
- 1.2 APPLICABLE PUBLICATIONS: Not Used.

### 1.3 SUBMITTALS:

- **1.3.1 Quality Control Plan:** The Contractor shall submit its Quality Control (QC) Plan by the Preconstruction Conference. The Notice to Proceed will not be issued until the plan has been approved by the Government. The Contractor shall resubmit the plan within 5 working days prior to any proposed changes in the plan.
- **1.3.2 Quality Control Reports:** The Contractor shall submit two legible copies of his Quality Control Report daily.

### 1.4 QUALITY CONTROL PLAN:

- **1.4.1** General: The Contractor shall develop, implement, and maintain a quality control system which meets or exceeds the requirements of Contract Clause FAR 52.246-0012 entitled: INSPECTION OF CONSTRUCTION. The plan shall identify personnel, lines of authority, procedures, instructions, records, and forms to be used. The approved plan shall be implemented not later than the construction start date.
- **1.4.2 Quality Control Plan:** The plan shall include as a minimum, the following:
- **1.4.2.1** A description of the QC organization, including chart showing lines of authority and acknowledgment that the QC staff shall report to the project manager or someone higher in the Contractor's organization.
- 1.4.2.2 The name, qualifications, duties, responsibilities and authorities of each person assigned a QC function.
- **1.4.2.3** A copy of the letter to the QC manager signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the QC manager shall be furnished.
- **1.4.2.4** Procedures for managing submittals including those of subcontractors, offsite fabricators, suppliers and purchasing agents.
- **1.4.2.5** Procedures for inspection of all work and materials.
- **1.4.2.6** Procedures for inspection of all tests.
- **1.4.2.7** Procedures for corrective action without dependence upon Government direction.
- **1.4.2.8** Procedures for reporting including proposed reporting formats.
- **1.4.3** <u>Coordination Meeting</u>: Prior to the start of construction, the Contractor shall schedule and meet with the Contracting Officer and discuss the QC system. During the meeting, a mutual understanding of the system details

shall be developed, including the forms for recording the QC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's inspection and control with the Government's inspection. Minutes of the meeting will be prepared by the Contracting Officer and will become a part of the contract file. There may be occasions when subsequent conferences will be called to reconfirm mutual understandings.

### 1.5 QUALITY CONTROL ORGANIZATION:

- **1.5.1** Quality Control System Manager: The Contractor shall identify an individual, within its organization at the site of the work, during all contract performance, who shall be responsible for overall QC management and have the authority to act in all QC matters for the Contractor. The QC System Manager shall have no other duties but Contractor Quality Control Management. The QC manager shall be approved by the Contracting Officer and changed if the QC manager is unable or unwilling to perform the duties as prescribed.
- **1.5.2** <u>Personnel:</u> A QC staff shall be maintained to perform all QC activities. The size of the staff during any specific work period may vary to cover work phase needs, shifts, and rate of placement. Personnel on the staff shall be fully qualified by experience and technical training to perform their assigned responsibilities and be directly hired by and work for the prime Contractor.
- **1.5.3** <u>Personnel Qualifications</u>: QC personnel shall be trained and experienced in QC matters and fully capable of performing their QC functions. The minimum qualifications for QC personnel shall be 5 years in the same or similar type construction, ability to read and understand specifications and plans, experienced in Quality control and Quality Control systems, and be able to communicate effectively.
- **1.6 CONTROLS:** Contractor QC is the means by which the Contractor assures himself that his construction complies with the requirements of the contract plans and specifications. The controls shall be adequate to cover all construction operations, including both onsite and offsite fabrication, and will be keyed to the proposed construction sequence. The controls shall include at least three phases of inspection for all definitive features of work as follows:
- **1.6.1** Preparatory Inspection: This shall be performed prior to beginning any work on any definable feature of work. It shall include a review of contract requirements, a check to assure that all materials and/or equipment have been tested, submitted and approved; a check to assure that provisions have been made to provide control testing; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials, equipment and sample work to assure that they conform to approved shop drawings or submittal data and that all materials and/or equipment are on hand. The Contracting Officer's Representative (COR) shall be notified at least 24 hours in advance of the preparatory inspection and such inspection shall be made a matter of record in the QC documentation as required below. Subsequent to the preparatory inspection and prior to commencement of work, the Contractor shall instruct each applicable worker as to the acceptable level of workmanship required in his OC plan in order to meet contract specifications.
- **1.6.2** <u>Initial Inspection</u>: This shall be performed as soon as a representative portion of the particular feature of work has been accomplished. The inspection shall include examination of the quality of workmanship and a review of control testing for compliance with contract requirements. The COR shall be notified at least 48 hours in advance of the initial inspection and such inspection shall be made a matter of record in the QC documentation as required below.
- **1.6.3** Follow-up Inspections: These shall be performed daily to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. Such inspections shall be made a matter of record in the QC documentation as required below. Final follow up inspections shall be conducted and test deficiencies corrected prior to the addition of new features of work.

### **1.7 TESTS:**

- 1.7.1 <u>Testing Procedures</u>: The Contractor shall perform the tests specified or as required to verify that control measures are adequate to provide a product, which conforms to contract requirements. The Contractor shall procure the services of an independent testing laboratory or establish a testing laboratory at the project site. Laboratory facilities must be approved by the Contracting Officer. A list of tests, which the Contractor understands he is to perform, shall be furnished as a part of the QC plan to the Contracting Officer. The list shall give the test name, specification paragraph containing the test requirements, and the personnel and laboratory responsible for each type of test. The Contractor shall perform the following activities and record and provide the following data:
- **1.7.1.1** Verify that testing procedures comply with contract requirements.
- 1.7.1.2 Verify that facilities and testing equipment are available and comply with testing standards.
- **1.7.1.3** Check test instrument calibration data against certified standards.
- 1.7.1.4 Verify that recording forms, including all of the test documentation requirements, have been prepared.

### **1.7.2** <u>Testing:</u>

- **1.7.2.1** <u>Capability Check</u>: The COR will have the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques.
- **1.7.2.2** <u>Capability Recheck</u>: If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$750 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.
- **1.7.2.3 Project Laboratory:** The COR will have the right to utilize (at no cost to the Government) the Contractor's control testing laboratory and equipment to make assurance tests and to verify the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.
- **1.7.2.4** <u>Transportation of Samples for Testing</u>: Costs incidental to the transportation of samples or materials will be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineer Division Laboratory, f.o.b., at the following address:

### 1.7.2.4.1 For Delivery By Mail:

Missouri River Division Laboratory 420 South 18th Street Omaha, Nebraska 68102

### 1.7.2.4.2 For Other Deliveries:

Same as above.

1.8 COMPLETION INSPECTION: At the completion of all work or any increment thereof established by a completion time stated elsewhere in the specifications, the QC manager shall conduct a completion inspection of the work and develop a "punch list" of items which do not conform to the approved plans and specifications. Such a list shall be included in the QC documentation, as required by paragraph 1.9 below, and shall include the estimated date by which the deficiencies will be corrected. The QC manager or his staff shall make a second completion inspection to ascertain that all deficiencies have been corrected and so notify the COR. The completion inspection and any deficiency corrections required by this paragraph will be accomplished within the time stated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates. The completion inspection and second inspection shall be performed before the work is turned over to the Public Works Contract Inspectors as being complete.

### 1.9 DOCUMENTATION:

- **1.9.1** The Contractor shall maintain a daily record of all QC activities. These records shall be maintained at the worksite throughout the term of this contract and be made available to the Contracting Officer at all times. Two legible copies of the daily QC report shall be provided to the Contracting Officer's Representative the next working day after the day of inspection. The Government will accept daily QC reports electronically, in either MS Word or Excel, submitted via e-mail.
- **1.9.2** Records shall include a description of trades working on the project, number of personnel working, weather conditions encountered, any delays encountered, and acknowledgment of deficiencies noted along with the corrective actions taken on current and previous deficiencies. Records shall also include factual evidence that required activities or tests have been performed, including, but not limited to, the items below:
- **1.9.2.1** Type and number of QC inspections and tests accomplished.
- **1.9.2.2** Results of QC inspections and tests.
- **1.9.2.3** Nature of defects, causes for rejection, etc.
- **1.9.2.4** Proposed remedial action.
- **1.9.2.5** Corrective actions taken.
- **1.9.2.6** All information contained in the attached sample QC Report.
- **1.9.3** A sample of Daily Quality Control Report form may be found at Technical Exhibit (TE) 3. The Contractor may use this form or a form of its own design so long as it contains the same information.
- **1.10 NOTIFICATION OF NONCOMPLIANCE:** The Contracting Officer will notify the Contractor of any noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his representative at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to any such stop orders the subject of claim for extension of time or for excess costs or damages.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

### **DIVISION 2 - SITE WORK**

### SECTION 02050

### **DEMOLITION**

### PART 1 GENERAL

- **1.1 SCOPE:** The work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for demolition and disposal required in this project.
- **1.2 APPLICABLE PUBLICATIONS:** The publications listed below form a part of this section to the extent referenced. Publications shall be assumed to be the most current edition in effect at the time the contract is awarded.

### 1.2.1 The Defense Reutilization and Marketing Office (SOPs), Fort Riley, KS:

DRMO Riley & FRA McConnell Customer Assistance Handbook.

DRMO's Customer Assistance Guidelines & Regulations for Hazardous Material/Hazardous Waste Turn-in.

### 1.3 SUBMITTALS:

- **1.3.1** <u>Receipts:</u> The Contractor shall obtain receipts for all salvable items turned in to Government Agencies and submit copies of the receipts to the Contracting Officer's Representative. DD Form 1348-1A serves as a receipt for items turned-in to DRMO.
- **1.3.2 DD Form 1348-1A:** The Contractor shall prepare DD Form 1348-1A in accordance with the above DRMO SOPs for all items turned-in to DRMO. DD Forms 1348-1A may be obtained from DRMO. Submit copies of DD Form 1348-1A to the Contracting Officer's Representative.

### PART 2 PRODUCTS (NOT USED)

### PART 3 EXECUTION

- **3.1 DEMOLITION AND DISPOSAL:** The Contractor shall demolish or remove from the work site all items designated to be demolished or removed as part of the replacement process, and any other items necessary to accomplish the required work. The specifications may not designate all demolition and removal items existing at the work site. Therefore, prior to beginning demolition or removal work, the Contractor shall verify with the Contracting Officer's Representative all items to be demolished or removed and all items to remain. The Contractor is responsible for loading, hauling, and unloading salvage items and debris. The Contractor is also responsible for preparing salvage items for turn in at the Fort Riley DRMO.
- **3.1.1** Removal: Carefully remove salvage items to prevent unnecessary damage to items to be salvaged or portions of components and structures to remain. Salvable items shall be removed and protected to prevent unnecessary damage. Items, embedded in concrete or masonry, or which are otherwise no removable, shall be neatly cut off at or beneath the surrounding surface. Open piping or conduit shall be capped or plugged, and the surrounding surface repaired as specified. Asphalt and concrete being removed shall be removed along saw cut lines.
- **3.1.2** Disposition of Nonsalvable and Nonrecyclable Items: Construction materials and debris, which will have no salvage or recycling value because of the type of material or the procedures required for dismantling or demolition, shall be disposed of at an off-post landfill, the Directorate of Environment and Safety (DES) Compost Area, or the Public Works Construction and Demolition Debris Landfill located on Campbell Hill Road north of Camp Funston as indicated below. Use of the DES Compost Area and Public Works Demolition and Construction

Debris Landfill shall be coordinated with the Contracting Officer. Unless otherwise indicated, nonsalvable items include: refuse; vegetative waste; miscellaneous concrete and asphalt; rock and earth; and nonmetallic plumbing, mechanical, and electrical components.

- **3.1.2.1. Refuse:** The Contractor shall place only ordinary refuse in dumpsters. No vegetative waste, construction and demolition waste, tires, recyclable materials, salvable items, or hazardous materials or waste will be placed in dumpsters. Large amounts of refuse shall be delivered to the Riley County Waste Transfer Station or other off-post landfill and fees paid by the Contractor.
- **3.1.2.2** <u>Vegetative Waste</u>: The Contractor shall deliver all vegetative waste to the DES Compost Area located in Camp Funston, in the vicinity of Building 1980.
- **3.1.2.3** <u>Construction and Demolition Waste</u>: All wood, lumber, rock, soil, etc. shall be disposed of at the Public Works Construction and Demolition Landfill.
- **3.1.3** Disposition of Salvable and Recyclable Items: Construction materials, which have salvage or recycling value, or which can be dismantled or removed without damage, shall be disposed of at the Public Works Materials Yard, the DES Recycle Center, or the DRMO Yard, Building No. 1950, Camp Funston, as directed by the Contracting Officer's Representative. Unless otherwise indicated, salvable items include: scrap metal; metal doors; builders' hardware; metal pipe, pipe fittings, and valves; and electrical components and fixtures.
- **3.1.3.1** Salvable Items: Salvable items that are turned in to DRMO, Building 1950 in Camp Funston, shall be done so in accordance with DRMO SOPs.
- **3.1.3.2** <u>Recyclable Materials</u>: The Contractor shall deliver all recyclable material to the DES Recycle Center, which is located in Camp Funston, Building 1980.
- **3.1.4** <u>Hazardous Materials and Hazardous Wastes</u>: Hazardous materials and hazardous wastes shall be turned in at DRMO in accordance with DRMO SOPs.
- **3.1.5 <u>DRMO Turn In Procedures</u>**: When items are being turned in to DRMO, the Contractor shall prepare the items for turn in accordance with DRMO SOPs. DRMO procedures include the following:
- **3.1.5.1** <u>Location and Hours of Operation</u>: Fort Riley DRMO, Building 1950, Camp Funston, Hours 7:30 a.m. to 3:00 p.m., Monday thru Friday, except Federal Holidays.
- **3.1.5.2** <u>Alternate Turn In Schedule</u>: When large quantities of items are being turned in, the Contractor shall contact DRMO Receiving Coordinators, as appropriate, to advise them of the number of truckloads scheduled and the requested turn-in date. DRMO Receiving Coordinators can be reached at 239-0531, extension 944 or 945.
- **3.1.5.3 Documentation:** All items must be accompanied by properly prepared turn in documents (DD Forms 1348-1A). The forms shall be prepared with a minimum of one original and 4 copies. The first three copies will be used for processing the items into the accounting system. The fourth copy will be proof of delivery copy to acknowledge receipt and be returned to the Contractor. The official receipt copy will be returned upon completion of processing the items into the accounting system. The Contractor is advised to obtain a copy of DRMO SOPs for instructions on completing the form.
- **3.1.5.4** <u>Removal of Concrete</u>: The Contractor shall remove concrete from items, which were imbedded in the concrete such as fence posts, pipe, and building structural members prior to turning the metal into the DES Recycle Center.
- **3.1.5.5** Segregation of Metals: The Contractor shall segregate scrap metal by type and thickness prior to turn in to DRMO.

- **3.1.5.6** <u>Palletizing and Banding</u>: The Contractor shall palletize and band salvable items on 4 by 4 foot pallets as required prior to turn in to DRMO. Pallets will be furnished by DRMO.
- **3.1.5.7** Unloading Material at DRMO: The Contractor shall unload salvable items at DRMO.

### 3.2 CUTTING AND PATCHING:

- **3.2.1** <u>Cutting</u>: Cutting shall be accomplished using power tools and equipment, which is best, suited for the task being accomplished and least likely to damage adjoining or adjacent surfaces.
- **3.2.2** <u>Patching</u>: Patch adjoining or adjacent surfaces using materials, which match the existing materials. Joints and seams shall be durable and as invisible as possible. Restore finishes of patched areas to match the existing finishes.
- **3.3 ASBESTOS CONTAINING MATERIALS:** The Contractor shall immediately notify the Contracting Officer's Representative should he encounter asbestos containing materials or items, which he suspects to contain asbestos. The Contracting Officer's Representative will coordinate with DES for testing and removal of the suspect material.
- **3.4 CLEANUP:** Removal of debris and general cleanup of the work site shall be accomplished at the end of each workday and upon completion of the required work. The Contractor shall ensure that waste and debris at the work site does not blow off the site. The Contractor shall be responsible for immediate cleanup of its spillage wherever it might occur.

### **DIVISION 2 - SITE WORK**

### SECTION 02082

# LEAD-BASED PAINT REMOVAL AND DISPOSAL FOR EXTERIOR METAL STRUCTURES

### PART 1 GENERAL

- **1.1 SCOPE:** The work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for the proper and safe removal, handling, and disposal of any lead-based paint (LBP) materials involved with this project.
- **1.1.1** The LBP related work for this project includes the removal and disposal of any LBP found from the exterior metal surfaces on the indicated structures.
- **1.1.2** It is the Contractor's responsibility to demonstrate conclusively that all work areas are lead-free. All painted surfaces shall be assumed to be coated with a LBP material.
- **1.2 APPLICABLE PUBLICATIONS:** The publications listed below form a part of this section to the extent referenced. Publications are referred to in the text by basic designation only. Publications shall be assumed to be the most current edition in effect at the time a contract is awarded.

### 1.2.1 American Conference of Governmental Industrial Hygienists (ACGIH) Publication:

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices (TLVs and BEIs) (Current Issue).

### 1.2.2 American National Standards Institute (ANSI) Standards:

- Z9.2 Fundamentals Governing the Design and Operation of Local Exhaust Systems.
- Z88.2 Practices for Respiratory Protection.

### 1.2.3 <u>National Fire Protection Association (NFPA) Publications</u>:

- 10 Portable Fire Extinguishers.
- 70 National Electric Code (NEC).
- 701 Standard Methods of Fire Tests for Flame-Resistant Textiles and Films.

### 1.2.4 National Institute for Occupational Safety and Health (NIOSH) Publications:

Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities.

### 1.2.5 <u>Underwriters Laboratories (UL) Publication</u>:

Test Performance of High Efficiency Particulate Air Filter Units.

### 1.2.6 U.S. Army Corps of Engineers Manual (EM):

385-1-1 General Safety and Health Requirements.

### 1.2.7 U.S. Army Technical Bulletin (Medical) (TB MED):

Technical Bulletin (Medical), Respiratory Protection Program.

### 1.2.8 U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Regulations:

29 CFR Part 1910 Toxic and Hazardous Substances: Permissible Exposure Subpart Z Limits

(PELs).

29 CFR Part 1910.134 Respiratory Protection.

29 CFR Part 1926 Construction Industry Standards.

29 CFR Part 1926.62 Lead.

### 1.2.9 U.S. Department of Transportation (DOT) Regulations:

49 CFR Part 171 Hazardous Substances.

49 CFR Part 172, Hazardous Materials Tables and Hazardous Materials Subparts B & C Communications

Regulations.

### 1.3 SUBMITTALS:

- **1.3.1** <u>Permits and Notifications</u>: The Contractor shall submit copies of the required permits, notifications and certifications to the Contracting Officer not less than 10 working days prior to the start of LBP removal.
- 1.3.2 Lead-Based Paint (LBP) Removal and Disposal Plan: The Contractor shall retain and utilize the services of a Certified Industrial Hygienist (CIH) certified by the American Board of Industrial Hygiene to develop, implement, and oversee enforcement of a written Lead-Based Paint (LBP) Removal and Disposal Plan. This plan shall be followed during the removal and disposal of LBP materials in this project. The CIH shall inspect the work site where LBP is to be removed, handled and disposed prior to development of the plan. The signature and certification number of the CIH shall be marked on the LBP Removal and Disposal Plan. This plan shall be submitted to the Contracting Officer for approval which must be granted prior to the start of work on each contaminated or assumed-to-be contaminated work site. As a minimum, the LBP Removal and Disposal Plan shall discuss and describe, or provide:
- **1.3.2.1** All elements and considerations required for the Accident Prevention Plan and work-phase safety plans as discussed in EM 385-1-1 (paragraphs 01.A.03 through 01.A.06 and Appendix Y).
- **1.3.2.2** Material Safety Data Sheets (MSDSs) for supplies to be utilized on this project, which may contain potentially hazardous or toxic chemical components.
- **1.3.2.3** Heat/cold stress monitoring and preventive measures.
- **1.3.2.4** Medical examinations and fitness reports.
- **1.3.2.5** Employee and Supervisor training records and certifications.
- **1.3.2.6** Certified Industrial Hygienist certification and resume of work experience.
- **1.3.2.7** Industrial Hygiene Technician(s) name, statement of qualifications, and work experience.

- **1.3.2.8** Outline of sequencing of LBP-related work and the interfacing with other trades involved in construction.
- **1.3.2.9** A written Respiratory Protection Program, as required by OSHA Standard 29 CFR 1910.134(b).
- **1.3.2.10** Pre-removal preparation, LBP abatement, and post removal cleanup verification procedures.
- **1.3.2.11** Waste storage and disposal shall be addressed in the LBP Removal and Disposal Plan, including routes to dumpsters.
- **1.3.2.12** Descriptions, drawings, and site layouts of work site isolation enclosures and negative air pressure systems locations, decontamination and temporary waste storage facilities and the boundaries of contaminated work areas.
- **1.3.2.13** Locations of air monitoring stations.
- **1.3.2.14** Where applicable, precautions and monitoring to be conducted for adjacent spaces which are inhabited.
- **1.3.3** <u>List of Materials</u>: The Contractor shall submit for approval, a certified list of materials or manufacturer's descriptive literature for all major materials proposed for use in the work specified herein.
- **1.3.4** <u>List of Equipment</u>: The Contractor shall submit a certified list or manufacturer's descriptive literature for all LBP removal, cleaning, personal protective, and air monitoring equipment proposed for use in the work specified herein. The list of equipment shall include certification that the Contractor's vacuums and other filtering equipment meet the requirements of ANSI Z9.2 and UL 586.
- **1.3.5** <u>Test Results</u>: The Contractor shall submit all test results from air monitoring and suspected Lead-Based Paint (LBP) material sampling.
- **1.3.5.1** Air monitoring results shall be reported to the Contracting Officer within 16 hours after the completion of a sampling period with written results to be submitted within 5 working days. Test results shall indicate each sample's pump serial number, pump start-time, pump stop-time, date, pump flow rate, exact location of where the sample was taken, and airborne concentrations in milligrams per cubic meter, as well as the items required for documentation, as discussed in paragraph: **AIR MONITORING REQUIREMENTS**. Air concentrations for area sampling shall **NOT** be calculated by time weighted averaging; time weighted averaging is permissible only for personnel sampling. Additionally, all airborne concentrations shall be calculated and reported at the 95 percent Confidence Level as outlined in paragraph: METHOD OF SAMPLING AND ANALYSIS. The Contractor shall maintain results of air monitoring for 30 years in accordance with OSHA Standard 29 CFR 1926.62. Test results shall include the names of the person(s) performing the air monitoring and the analyst who conducted the sample analysis and shall bear the following statement signed by the CIH:

"I certify that the above samples were taken and that all analyses performed in strict compliance with the specifications for this project."

**1.3.5.2** Suspected LBP material bulk test and/or other monitoring results shall be submitted to the Contracting Officer within 48 hours after taking the sample. Tests shall be Toxicity Characteristic Leachate Procedure (TCLP) and Total Lead Analysis (see reference para 1.6.1 Laboratory Qualifications, For hazardous waste characterization, the Contractor shall follow the sampling and analysis requirements contained in the Waste Analysis Plan from Fort Riley's Part B Permit). Floor plans referencing each sample's location, type, and size shall be attached to each copy of test results.

### 1.3.6 Proof of Participation and Accreditation:

**1.3.6.1** The Contractor shall submit proof to the Contracting Officer that the independent industrial hygiene or environmental health testing laboratories used for air/bulk sample analysis are successfully participating in the

"Proficiency Analytical Testing (PAT) Program for Laboratory Quality Control for Lead" by the American Industrial Hygiene Association (AIHA), and/or is accredited under the AIHA Laboratory Accreditation Program (for laboratories). The laboratory used must also participate in Environmental Lead Proficiency Analytical Testing under the EPA's National Lead Laboratory Accreditation Program.

- **1.3.6.2** The Contractor shall submit proof to the Contracting Officer that the operator of any X-Ray fluorescence (XRF) detector has demonstrable training and/or experience in its use.
- **1.3.7 Proof of License and/or Registration:** The Contractor shall submit proof of license and/or registration in the State of Kansas in accordance with applicable State regulations prior to the LBP removal project.
- **1.3.8** <u>Proof of Employee Training and Medical Examinations</u>: Prior to the start of the LBP removal project, the Contractor shall submit proof that:
- 1.3.8.1 Employees have been trained/certified in the State of Kansas in accordance with applicable State regulations, and
- 1.3.8.2 A Certified Industrial Hygienist (CIH), will be continuously over-seeing the LBP abatement project, and
- **1.3.8.3** Employees have completed all medical examinations required by these specifications.
- **1.3.9 Proof of Disposal:** The Contractor shall provide copies of DD FORM 1348-1A, turn-in documents, to the Contracting Officer's Representative for all materials tested and classified as "HAZARDOUS WASTE" and turned into Fort Riley's DRMO. "HAZARDOUS WASTE" must be disposed of by the Contractor at DRMO on Fort Riley. All materials tested and classified as "NON-HAZARDOUS WASTE" shall be disposed of off Fort Riley by the Contractor at a Government approved sanitary/industrial landfill. The Contractor shall provide returned signed manifests or Bills of Lading to the Contracting Officer's Representative for all "NON-HAZARDOUS WASTE" shipped off Fort Riley. Fort Riley does not have a sanitary/industrial landfill.
- **1.4 PERMITS AND NOTIFICATIONS:** The Contractor shall be responsible to obtain all necessary permits and certifications of personnel in conjunction with Lead-Based Paint (LBP) removal, hauling, and disposition and provide timely notification of such actions as may be required by Federal, State, regional and local authorities. Fees and/or charges for these permits shall be included in the Contractor's bid price. The Contractor shall submit copies of the required permits, notifications and certifications to the Contracting Officer not less than 10 working days prior to the start of LBP removal.

### 1.5 TERMINOLOGY:

- **1.5.1 Abatement:** The process to eliminate LBP building materials.
- **1.5.2** <u>Air Monitoring</u>: The process of measuring the lead content of a specific volume of air in a stated period of time. Personal air sampling results shall be calculated to reflect the employee's 8-hour time weighted average (TWA) exposure. Integrated area sampling results are reported directly without additionally calculating a TWA.
- **1.5.3** <u>Airlock:</u> A system for permitting ingress or egress without permitting air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways at least two to three feet apart.
- **1.5.4** <u>Clean Room:</u> An uncontaminated area or room, which is part of the worker decontamination enclosure system, with provisions for clean storage of workers' street clothes and protective equipment.
- **1.5.5** <u>Curtained Doorway</u>: A covered opening to allow ingress or egress from one room to another while permitting minimal air movement between the rooms. Such doorways may be constructed using solid, self-closing, sealing doors or with overlapping sheets of 6-mil polyethylene. If a solid door is utilized, an automatic vent system to provide makeup air and protect against any positive air buildup must be installed. When polyethylene sheets are

used, three overlapping sheets shall cover the opening, each secured along the top of the doorway, with the vertical edge of the first and third sheets secured along one side of the doorway and the second (or middle) sheet secured along the opposite side of the doorway (see paragraph: AIRLOCK, above). The sheets are weighted to close quickly after being released.

- **1.5.6** Equipment Room: The first room (considered to be a contaminated area) to be entered from the LBP Control Area to begin the decontamination process in the worker decontamination enclosure system, with provisions for collection of used disposable protective clothing, and the removal, cleaning and storage of reusable protective equipment.
- **1.5.7** <u>High Efficiency Particulate Air (HEPA) Vacuum Equipment</u>: Filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining LBP materials.
- **1.5.8** <u>High Efficiency Particulate Air (HEPA) Filters</u>: Filters capable of trapping and retaining 99.97 percent of LBP materials.
- **1.5.9** <u>Lead-Based Paint (LBP)</u>: LBP, when considering paint currently on facilities, is any paint that has a laboratory test positive finding of lead-based paint.
- **1.5.10** <u>Lead-Based Paint Control Area</u>: An area where LBP removal operations are performed and which is sealed and/or isolated by physical barriers to prevent the spread of LBP MATERIALS.
- **1.5.11** Loading Area: A series of connected rooms with curtained doorways between any two adjacent rooms to be used for decontamination of bags of waste materials and equipment to be removed from the LBP Control Area. This area shall be separated from the LBP Control Area by an airlock. After this area is constructed, all materials going into or leaving the LBP Control Area shall be through this loading area. No person shall enter or exit the LBP Control Area from outside by passing through the loading area. The loading area shall be considered contaminated to the same degree as the LBP Control Area and shall be separated by a barrier from other areas of the building.
- **1.5.12** Negative Air Pressure Equipment: A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low-velocity air flow through the worker decontamination enclosure system and loading areas into contaminated work areas and exhausting that air through a HEPA filter to the outside of the building through properly sealed ducts.
- **1.5.13 Removal:** The act of removing and transporting LBP containing or contaminated materials from the work site to a suitable disposal site.
- **1.5.14** Shower Area: An area between the clean room and the equipment room in the worker decontamination enclosure system, with hot and cold running water and waste piping suitably arranged for complete showering of workers during decontamination and collection of contaminated wash waters.
- **1.5.15** <u>Waste Generator</u>: Any owner or operator of a source covered by EPA regulations whose act or process produces Lead containing waste. For this project, the waste generator is the Government.
- **1.5.16** Waste Shipment Record (WSR) for Non-Hazardous Waste: The shipping document, to be originated and signed by the Contractor, used to track and substantiate the disposition of Lead containing waste.
- **1.5.17** Wet Cleaning: The process of eliminating LBP contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with amended water or LBP removal encapsulant, and then disposing of the cleaning tools as LBP contaminated waste.
- **1.5.18** Worker Decontamination Enclosure System: A decontamination enclosure system for workers, typically consisting of a clean room, a shower area, and an equipment room. The system may be constructed and later dismantled as required, or be a self-contained mobile type.

### 1.6 LABORATORY AND SAFETY AND HEALTH PERSONNEL QUALIFICATIONS:

**1.6.1** <u>Laboratory Qualifications</u>: All air monitoring analyses shall be performed by independent industrial hygiene or environmental health testing laboratories approved by the CIH. The laboratories used for air sample analysis shall be successfully participating in the "Proficiency Analytical Testing (PAT) Program for Laboratory Quality Control" as established by the American Industrial Hygiene Association (AIHA); and/or shall be accredited under the Laboratory Accreditation Program (for laboratories). For hazardous waste characterization, the Contractor shall follow the sampling and analysis requirements contained in the Waste Analysis Plan from Fort Riley's Part B Permit. The labs must be KDHE certified and approved by the DES Hazardous Waste Program Coordinator, 1-785-239-8436. Copies of the KDHE lab certifications shall be provided to the DES Hazardous Waste Program Coordinator.

### 1.6.2 Safety and Health Personnel Qualifications:

1.6.2.1 Certified Industrial Hygienist: Certified Industrial Hygienist shall be an independent CIH, contracted by the Contractor and responsible to both the Contractor and the Contracting Officer, with overall responsibility for the preparation, implementation, and enforcement of the LBP Removal and Disposal Plan, including the air monitoring program. This CIH (American Board of Industrial Hygiene (ABIH) certified in Comprehensive Practice) shall have demonstrable training and/or expertise in X-Ray Fluorescence Detector monitoring techniques, and in the establishment of respiratory protection programs. The CIH shall have a working knowledge of applicable State and Federal LBP Identification and Abatement programs, occupational safety and health regulations and formal educational training in occupational safety and health. The CIH is not required to be present at the work site on a full-time basis. The CIH may delegate the ongoing implementation and enforcement of the LBP Removal and Disposal Plan, including the air monitoring program and final visual inspections of removal areas, to IHT(s) defined below. The CIH shall conduct regular on-site supervision and continued evaluation of effectiveness of the plan and the IHT implementation of such. Supervision shall include at least weekly inspections of the work site during LBP removal and disposal operations for removal projects of two (2) weeks duration or longer. Prior to all gross LBP removal, the CIH shall inspect each LBP Control Area to ensure the enclosure is properly and completely sealed, that safety precautions are followed, that the HEPA exhaust units provide sufficient ventilation (verified by pressure differential readings, volume calculations, and smoke testing), and to ensure the required respiratory and personal protective equipment is available for the project.

**1.6.2.2** <u>Industrial Hygiene Technician</u>: Industrial Hygiene Technician(s) shall be an independent IHT assigned to the site on a full-time basis for the duration of the project with functional responsibility for implementation and enforcement of the LBP Removal and Disposal Plan, including the air monitoring program and final visual inspections. The IHT(s) shall have a sound working knowledge of applicable State and Federal occupational safety and health regulations and formal training in occupational safety and health. The IHT(s) shall also have demonstrable training and/or experience in LBP sampling techniques and respiratory protection program implementation. The IHT(s) shall be accepted by and under the supervision of the CIH to implement and enforce the LBP Removal and Disposal Plan.

### 1.7 WORKER SAFETY AND PROTECTION:

- **1.7.1** Worker Training: The Contractor shall ensure that all employees who perform LBP removal and disposal under this contract have received training required by OSHA Standard 29 CFR 1926.62 and applicable State regulations and that training records are on file and available for review and/or submittal, and are maintained for 1 year beyond the last date of employment.
- **1.7.2** Worker Medical Examinations: Contractor shall provide medical examinations for all employees engaged in LBP removal and disposal operations in accordance with OSHA Standards 29 CFR 1910.134(b), 29 CFR 1926.62; ANSI Z88.2-1988; Corps of Engineers EM 385-1-1 (as revised); TB MED 502 and applicable State regulations. The Contractor shall ensure that all employee examination results are on file in his office and available for review and are maintained in accordance with OSHA Standard 29 CFR 1926.62.

- **1.7.3** Worker Protection and Decontamination: The Contractor shall take all safety measures and precautions necessary to protect employees and building occupants in accordance with OSHA Standard 29 CFR 1926.62; ACGIH TLVs and BEIs (latest issue); EM 385-1-1 (latest issue); and applicable State regulations. The Contractor shall provide employees with a worker decontamination enclosure system in accordance with OSHA Standard 29 CFR 1926.62, and as specified herein.
- **1.7.4** Worksite Safety: The Contractor shall take all safety measures and precautions necessary to protect its employees and building occupants in accordance with OSHA Standard 29 CFR Parts 1910 and 1926; Corps of Engineers EM 385-1-1 (latest issue); NFPA Standards 10 and 70; and applicable State and Local regulations.
- **1.7.5** <u>Posting Requirements</u>: The Contractor shall post copies of OSHA Standard 29 CFR 1926.62; and other applicable Federal and State regulations in the clean room of the worker decontamination enclosure system.
- **1.7.6** Heat/Cold Stress Prevention Program: The Contractor's CIH shall develop and implement a Heat/Cold Stress Prevention Program, detailed in the LBP Removal and Disposal Plan, to protect workers from the effects of heat/cold and humidity levels expected during the removal project. As a minimum, the program shall describe training, and physiological (body temperature and pulse rate) and environmental monitoring to be conducted. The Heat/Cold Stress Prevention Program shall also establish work/rest periods associated with the physiological and environmental monitoring as outlined in NIOSH 85-115, ACGIH TLVs/BEIs, or other Contracting Officer-approved methods.
- **1.7.7** <u>Illumination</u>: The Contractor shall ensure that all occupied spaces, including work, rest/break, and passageways, are illuminated to a minimum of 10 foot`candles. The Contractor, as needed, shall provide supplementary lighting.
- **1.7.8** <u>First Aid and Emergency Response Requirements:</u> The Contractor shall provide for appropriate emergency first aid equipment, including an industrial-type first aid kit, as per Corps of Engineers EM 385-1-1, paragraph 04.B, and a 20-pound ABC-rated fire extinguisher.
- 1.7.9 Hot Work: Hot work (work involving the use of an open flame, such as a welding torch) is permitted on this project but only with written permission (Hot Work Permit) from the DPW Fire Department via the Contracting Officer. For hot work to be conducted, the Contractor shall obtain a Hot Work Permit from the DPW Fire Department prior to conducting such work, shall utilize fire-retardant polyethylene sheeting in the area in which hot work activities will occur, and shall designate an individual at each hot work site as a fire watch. This person's sole responsibility shall be to monitor the hot work and have immediate access to the fire extinguisher located at each hot work site. The Contractor shall obtain a new permit at the start of each work shift during which hot work will be conducted.
- **1.8 ENVIRONMENT PROTECTION:** The Contractor shall protect against the contamination of surfaces and fixtures outside the controlled work area in accordance with OSHA 29 CFR 1926.62.

### PART 2 PRODUCTS

- **2.1 MATERIALS:** Materials furnished under this section shall be standard products of manufacturers regularly engaged in the production of the items, and the most current design, which conforms to the requirements specified.
- **2.2 LEAD-BASED PAINT (LBP) HANDLING MATERIALS AND EQUIPMENT:** Materials and equipment used to wet, remove, seal, handle, and dispose of LBP materials shall conform to OSHA Standard 29 CFR 1926.62; and applicable State regulations.
- **2.2.1** <u>Fire Retardant Polyethylene Sheeting</u>: Polyethylene sheeting conforming to NFPA 701 for surface flammability and smoke density.
- 2.2.2 Power Equipment: All power equipment shall conform to OSHA Standards. Equipment guarding shall be

present and in good working order as required by EM 385-1-1. Also, the Contractor shall ensure that employees and building occupants are not exposed to LBP abatement-equipment noise levels higher than 84 dBA without being provided approved ear protection. All equipment shall be rated intrinsically safe for Class I, Division 1, Groups A, B, C, and D areas.

- **2.2.3 Spraying Equipment:** Spraying equipment used to apply chemicals for removal shall be of a low-pressure type to prevent disturbance of the LBP prior to physical, controlled removal.
- **2.2.4** <u>Vacuum Equipment</u>: All vacuum and exhaust equipment shall have high HEPA filters which conform to ANSI Z9.2. HEPA filters shall be capable of effectively capturing 99.97 percent of LBP materials. No bypass devices will be permitted. Provisions shall be made to empty the debris collection hoppers without causing visible emissions of particulates.
- **2.3 WORKER PROTECTIVE CLOTHING AND EQUIPMENT:** Shall conform to OSHA Standard 29 CFR 1926.62.

### **2.3.1 Respiratory Protection:**

- **2.3.1.1 Types of Respirators:** The Contractor shall provide workers with and require the use of respirators approved by MSHA/ NIOSH for Lead in accordance with OSHA standard 29 CFR 1926.62. Where other air contaminants (e.g., organic vapors, acid gases, or other respiratory hazards) are present, the CIH shall evaluate the exposure potential and shall, when appropriate, designate appropriate MSHA/NIOSH-approved respirators, engineering controls, or other methods to protect the health and safety of the workers. The minimum respiratory protection allowable shall be provided by an approved half-facepiece air-purifying respirator with HEPA cartridges. Disposable, single-use respirators are not acceptable. Upgrading of respiratory protection levels shall be the responsibility of the Contractor's CIH. Upgrading shall be based upon continued air monitoring and evaluations of work operations and practices. Supplied air and related delivery systems when utilized, shall supply Grade D breathing air and shall conform to all other requirements contained in OSHA standard 29 CFR 1910.134, as a minimum. Compressors shall be constructed with suitable in-line air filters and sorbent beds installed to further assure air quality; with a receiver of sufficient capacity to enable the respirator wearer to escape from a contaminated atmosphere in the event of compressor failure; and with alarms to indicate compressor failure, high temperature conditions, and elevated levels of carbon monoxide. The CIH shall be responsible for ensuring the air intake for air compressors/movers is located so that no hazardous dusts, mists, fumes, or vapors are entrained into the air supply. The Contractor, as required by 29 CFR 1910.134, shall conduct testing of supplied air, periodically.
- **2.3.1.2** <u>Respirator Use</u>: Respirators shall be worn at all times in the LBP Control Area (enclosed or non-enclosed) while the following activities are being performed (After LBP has been removed and an area has passed visual inspection and final clearance air monitoring, respirators no longer need be worn in that area):
- **2.3.1.2.1** During any material or equipment removal when LBP may be disturbed.
- **2.3.1.2.2** When installing walls or barriers, or making structural modifications by sawing, hammering, drilling, or any operation that could cause abrasion, cutting, shock or vibration to LBP-containing materials.
- **2.3.1.2.3** Being present in the LBP Control Area after the area has been prepared, while LBP removal and cleanup operations are being performed.
- **2.3.1.3** Respirator Fitting and Training: The Contractor shall implement and maintain a Respiratory Protection Program in accordance with OSHA Standards 29 CFR 1910.134 and 29 CFR 1926.62. This program shall be described in detail in the LBP Removal and Disposal Plan and shall incorporate the following elements, as a minimum:
- **2.3.1.3.1** Respirator Training: Employees shall be instructed in the selection, wearing, limitations, cleaning,

storage, and maintenance of the type(s) of respirators they will be using.

- **2.3.1.3.2** Respirator Fit Testing: Each employee shall be qualitatively fit tested at the beginning of the project with the respirators they are issued to ensure proper protection. Fit testing shall be performed using irritating smoke tubes, or equivalent methods according to OSHA Standard 29 CFR 1926.62. Qualitative fit testing will be permitted ONLY for half-mask air purifying respirators. For negative-pressure air-purifying respirators providing greater protection than half-mask respirators, quantitative fit-testing shall be required. Employees shall be given a choice of facepiece sizes or styles and respirator brands in order to ensure an adequate fit. Any facial hair that may interfere with the facepiece seal shall be removed prior to fit testing and actual respirator use. In addition, employees shall perform positive/negative pressure fit tests on all negative-pressure air-purifying respirators each time they are put on, in accordance with manufacturer's instructions.
- **2.3.1.3.3** Respirator Storage: Respirators and filter cartridges shall be stored in a place and manner that they cannot become contaminated with LBP. New cartridges shall be installed each time a worker enters the LBP Control Area.
- **2.3.1.3.4 Powered Air-Purifying Respirators (PAPRs):** PAPR batteries shall be fully charged prior to the work shift in which they are to be worn. The air flow of PAPRs shall be checked by a mechanical device at the beginning of each work shift in which they are to be worn and every 4 hours thereafter, unless the manufacturer indicates more frequent checking is required. No PAPR shall be permitted to be utilized if decreased air flow, poor battery charge or condition, or other evaluations indicate the device is not operating at maximum efficiency. Any employee who chooses to use a PAPR shall be provided such respiratory protection unless the PAPR will not provide adequate protection.

### 2.4.1 Protective Clothing:

- **2.4.1.1** All personnel engaged in LBP removal work shall wear approved disposable protective clothing constructed of spun-bonded olefin or polypropylene fabrics, or other material of equivalent resistance to penetration by LBP. A full body suit is recommended in lieu of a separate set of coveralls, head covers, and shoe covers. Disposable whole body clothing including head covers, gloves, and shoe coverings shall be provided to and worn by all personnel in the LBP Control Area. If elastic sleeve closures are not provided, sleeves shall be secured with duct tape to gloves. Footwear having a non-skid tracking surface shall be provided and used by all personnel within the LBP Control Area.
- **2.4.1.2** All clothing worn, or equipment used, within the LBP Control Area shall be considered contaminated and shall be treated as LBP containing material and undergo the same disposal or decontamination procedures.
- **2.4.1.3** All disposable clothing shall be flame-retardant. All openings in clothing shall be taped to prevent penetration by LBP materials.

### 2.5 WARNING SIGNS AND LABELS:

- **2.5.1** Signs: The Contractor shall post warning signs at the perimeter of the LBP Control Area prior to LBP removal in accordance with OSHA Standard 29 CFR 1926.62.
- **2.5.2** <u>Labels:</u> The Contractor shall permanently affix warning labels to all products and bags/containers containing or contaminated with lead in accordance with OSHA Standard 29 CFR 1926.62; and DOT Standard 49 CFR Part 171 and 172, Hazardous Substances: Final Rule. Labels shall be printed in large bold letters on a contrasting background.
- **2.6 OTHER MATERIALS AND EQUIPMENT:** Other materials and equipment such as those used to construct the decontamination enclosure systems and isolation barriers shall be new, uncontaminated with Lead, in serviceable condition, and the appropriate items for the intended purpose.

### PART 3 EXECUTION

- **3.1 GENERAL REMOVAL AND DISPOSAL REQUIREMENTS:** The Contractor shall remove and dispose of LBP materials as specified herein. The Contractor shall describe in detail the method(s) to be used and the rationale for the method(s) chosen. Removal and disposal of LBP-containing material shall include all special LBP removal and disposal materials and equipment, worker protective clothing and equipment, air monitoring, and construction of worker decontamination enclosure system, a loading area, and isolation barriers necessary to accomplish the required work.
- **3.2 PREPARATION FOR LEAD-BASED PAINT (LBP) REMOVAL:** Work site preparation and worker safety and protection, shall be accomplished in accordance with OSHA Standard 29 CFR 1926.62; Corps of Engineers EM 385-1-1; applicable State regulations; and the following requirements:

### 3.2.1 Preparation for Gross Removal:

- **3.2.1.1** Accessibility of Work Areas: The Government will prearrange access by providing a reasonable, direct and unobstructed path to the work sites. During LBP removal the Contractor shall confine its equipment and employee movement to these designated areas. Where conflicts arise due to Contractor's operations, the decision of the Contracting Officer or his authorized representative shall be final.
- **3.2.1.3** <u>Appurtenances</u>: All items attached to the work surface, but not requiring LBP abatement, shall be cleaned with a HEPA filter-equipped vacuuming device or by wet cleaning methods and removed or sealed with polyethylene sheeting.
- **3.2.1.4** Enclosed Lead-Based Paint (LBP) Control Area Requirements: The area in which LBP removal is to be performed shall be completely sealed to contain lead containing debris. On large structures, the contractor shall enclose only that portion which can be completely sealed. A controlled area shall be provided from the work enclosure to the worker decontamination enclosure. Work areas off the ground shall have provisions to prevent tools and materials from falling.
- **3.2.1.5** Worker Decontamination Enclosure System: The Contractor shall furnish material and labor for the construction of a worker decontamination enclosure system consisting of an equipment room, a shower area, and a clean room. The rooms shall be of a sufficient size to accommodate the Contractor's operation within. The rooms shall receive the same masking/sealing treatment as LBP Control Areas. Worker decontamination enclosure systems, shall be physically located to prevent LBP workers from contaminating adjacent areas when leaving the control area. In work outside of buildings, decontamination systems adjacent to control areas are adequate.
- **3.2.1.5.1** The clean room shall be used to store LBP workers' street clothing, food stuffs, clean protective clothing, equipment, and to provide a dressing area for personnel. Contaminated clothing shall not be permitted in this room. Workers shall only enter this room from the outside dressed in street clothes, or naked from the showers.
- **3.2.1.5.2** The shower area shall be provided with at least one shower head that is supplied with hot and cold water, and regulated from within the shower. Adequate quantities of soap, hair shampoo and towels shall be provided to accommodate each person who emerges from the LBP Control Area. The floor of the shower area shall be covered with a minimum of two layers of 6-mil thick polyethylene sheeting unless it is constructed of an impervious, easily washable material. Shower water shall be filtered to remove LBP or collected and disposed as an LBP contaminated waste.
- **3.2.1.5.3** The equipment room shall be used to provide an intermediate area of lesser LBP contamination for decontamination of contaminated items (tools and equipment) and personnel. This room shall be HEPA vacuumed or wet cleaned daily to avoid LBP dust accumulations. Workers shall also be HEPA vacuumed or wet cleaned from head to toe each time before entering the equipment room from the LBP Control Area. In case of an emergency, aid for a seriously injured worker shall not be delayed for reasons of decontamination.

- **3.2.1.6** <u>Loading Area</u>: This area shall be separated from the LBP Control Area by an airlock. After this area is constructed, all materials going into or leaving the LBP Control Area shall be through this loading area. No person shall enter or exit the work area from outside by passing through the loading area. The loading area shall be considered contaminated to the same degree as the LBP Control Area and shall be separated by a barrier from other areas of the building.
- **3.2.2** <u>Prohibited Activities</u>: Smoking, eating, chewing of gum or tobacco, and drinking, as well as transport/storage of food or tobacco into the LBP Control Areas, in the equipment room, or the shower area, shall not be permitted at any time.

### 3.2.3 Temporary Power And Lighting:

- **3.2.3.1** General: All electrical circuits and lights in or affected by the LBP Control Area shall be deenergized. The Contractor shall provide labor and materials to maintain temporary power and lighting in the LBP Control. Temporary electrical service utilized in the enclosure shall be connected to ground fault interrupt circuit (GFIC) protected outlets located outside the enclosure.
- **3.2.3.2** <u>Lighting</u>: Natural lighting shall be supplemented as needed by portable lights located inside or outside the enclosure, as appropriate, in order to provide a well-lighted work zone illuminated to a minimum intensity of 10 foot-candles. Temporary lights utilized inside the enclosure shall be suitable for the LBP-contaminated environment involved with the removal operations.
- **3.2.3.3 Protection of Electrical Equipment:** If motors or other electrical equipment inside the LBP Control Area must remain operational during the abatement process, the Contractor shall construct a special enclosure for protection of the equipment and shall provide a system to supply cooling air from outside the LBP Control Area. Equipment shall be rated intrinsically safe for Class I, Division 1, Groups A, B, C, and D areas.

### 3.3 REMOVAL:

### 3.3.1 General Handling and Removal Requirements:

**3.3.1.1** Adequate local exhaust to capture LBP materials produced by abrading shall be provided by means of an approved HEPA-filtered vacuum. Specialized equipment having integral ventilation hoods, which are connected, to a HEPA vacuum with a flexible hose shall be used. Local exhaust ventilation shall comply with ANSI Z9.2. HEPA filters and removed material and debris shall be handled and disposed of as contaminated material.

### 3.3.2 Removal:

- **3.3.2.1** Worker Protection and Decontamination: The Contractor shall protect employees and area inhabitants in accordance with OSHA Standard 29 CFR 1926.62; Corps of Engineers EM 385-1-1; applicable State regulations; and all requirements specified herein.
- **3.3.2.1.1** Each worker and authorized visitor shall, upon entering the job site, remove street clothes in the clean change room and don appropriate respirator and protective clothing before entering the equipment room or the LBP Control Area. When changing from street clothes to work clothes, the worker shall remove all street clothing and dress in only the protective clothing and don the equipment specified herein.
- **3.3.2.1.2** Each worker and authorized visitor shall, each time he leaves the LBP Control Area, remove gross contamination from clothing prior to entering the equipment room; proceed to the equipment room and remove all clothing except respirators and place disposable protective wear in a 6-mil polyethylene bag in the equipment room. Still wearing the respirator, proceed naked to the showers; clean the outside of the respirator with soap and water while showering; remove the respirator and dispose of cartridges; thoroughly shampoo and wash themselves; and wash and rinse the inside of the respirator.

- **3.3.2.1.3** Following showering and drying off, each worker and authorized visitor shall proceed directly to the clean change room and dress in street clothes or in clean coveralls before eating, smoking, drinking, or reentering the LBP Control Area, or leaving the LBP abatement project area.
- **3.3.2.1.4** Contaminated work footwear shall be stored in the equipment room when not in use in the LBP Control Area. Upon completion of LBP abatement, dispose of footwear as contaminated LBP waste or clean thoroughly inside and out using soap and water before removing from LBP Control Area or from the equipment room.
- **3.3.2.2** Embedded Items: Utility lines and other electrical or mechanical appurtenances embedded in the material shall be:
- **3.3.2.2.1** Temporarily loosened to permit cleanup of their surfaces and the surfaces from which they were removed. They shall be reinstalled, if they won't be replaced by renovation work.
- **3.3.2.2.2** Removed and disposed of, if they will be replaced by renovation work.
- **3.3.2.3** Removal of Lead-Based Paint (LBP) Contaminated Items: Contaminated architectural, mechanical and electrical appurtenances to be removed and disposed of, such as pipes and fittings, light fixtures, conduit and other items, shall be precleaned with a HEPA-filtered vacuum or wet cleaned.
- **3.3.2.4** Cleanup: The Contractor shall maintain work sites in clean, orderly, and safe condition during the course of the work, and perform a daily cleanup of removed LBP materials inside the work areas and final cleanup upon completion of the work on each structure. Work site cleanliness and final clean up shall be accomplished in accordance with OSHA Standard 29 CFR 1926.62; and the requirements herein.
- **3.3.2.4.1** The Contractor shall, without additional expense to the Government, clean those areas outside the work area that become contaminated with LBP-containing dust or debris as a consequence of the Contractor's work practices, or a one time event, in accordance with the procedures indicated herein. Air monitoring, as specified in paragraph: FINAL CLEARANCE MONITORING, shall be conducted at no additional expense to the Government to document that cleanup of these contaminated areas has been successful and that lead concentrations are as per paragraph: FINAL CLEARANCE ACTION LEVELS.
- **3.3.2.4.2** The Contractor shall perform a daily cleaning of any area outside the work area, which, not withstanding the specifications contained herein, becomes visibly contaminated with airborne or tracked-in dust or other debris as a consequence of work performed on that day.
- **3.3.2.5** Final Cleanup and Visual Inspection: After completion of LBP removal work, all surfaces from which LBP has been removed shall be wet wiped, then cleaned by a HEPA filtered vacuum until the CIH or IHT are satisfied that no LBP remains attached to substrate. Do not dry sweep or blow down the area with compressed air. Wet clean, and/or HEPA vacuum all exposed surfaces, walls, columns, equipment, etc., within the LBP Control Area (prior to conducting final visual inspection and final clearance monitoring).
- **3.3.2.6** Remove the final polyethylene sheeting cover (retaining polyethylene sheeting on openings to areas exterior to the LBP Control Area, such as doors, windows, vent ducts, equipment room, etc.) and clean surfaces by wet cleaning and/or HEPA vacuum. Proceed with final clearance air monitoring.

### 3.4 DISPOSAL OF NON-HAZARDOUS LEAD-BASED PAINT DEBRIS:

**3.4.1** Collection of Lead-Based Paint (LBP) Waste Materials: All LBP materials removed shall be collected daily in two (2) 6-mil polyethylene bags or other approved sealed impermeable containers (i.e., double-bagging or double-containerization). A fine spray of removal encapsulant shall be used to keep LBP in the waste containers damp to minimize airborne LBP dust. The LBP-containing material, which has been removed, shall be packed daily, while still wet, in bags/containers. Affix warning labels having waterproof print and permanent, waterproof adhesive to bags/containers.

- **3.4.2** <u>Disposal of Lead-Based Paint (LBP) Waste Materials</u>: Waste bags/ containers containing LBP materials shall be hauled away by the Contractor as soon as there is a sufficient quantity for a truck load. Procedures for hauling and disposal shall comply with applicable Federal, State, regional, and local Government standards.
- **3.4.2.1** Trucks hauling LBP waste bags/containers shall be totally enclosed to prevent loss or damage to bags/containers enroute to the disposal site. LBP waste shall be buried at a sanitary/industrial landfill off of Fort Riley approved by the Contracting Officer prior to shipment.
- **3.4.2.2** Sealed polyethylene bags/containers shall be put into the approved landfill unless they have been broken or damaged. Damaged bags/containers shall be overpacked in another 6-mil bag or sealed in additional impermeable containers and buried. Workers unloading and handling the sealed bags/containers at the disposal site shall wear appropriate personal protective equipment.
- **3.4.2.3** The Contractor shall prepare and sign the Waste Shipment Record (WSR) for each load of LBP-containing waste transported off the facility site. The Contractor shall ensure that the WSR is completed by the transporter(s) and waste disposal site operator.
- **3.4.2.4** The Contractor shall ensure containers and vehicles used to transport LBP-containing waste materials are labeled as outlined herein.
- **3.4.3** <u>Disposal of Lead-Based Paint (LBP) Free Items</u>: Items from which LBP has been removed, cleaned, and coated with an encapsulant sealer shall be disposed of as an uncontaminated waste off Government premises or may be salvaged by the Contractor and credit for the value thereof, if any, shall have been identified and reflected in the Contractor's bid price.
- **3.5 VISUAL INSPECTIONS:** The presence of residue or debris, visible to the naked eye, on surfaces from which LBP was to have been removed or in areas where abatement has taken place indicates that additional cleaning of these surfaces is required. Similarly, the presence of unencapsulated or insufficiently enclosed material indicates that the measures were inadequately performed. Visual inspection is NOT intended as a substitute for air sampling at any stage of the project. The basic premise of this practice is that an area where residue or debris visible to the naked eye is still present is not sufficiently clean for subsequent stages of work, including application of sealer, removal of plastic sheets, and final air sampling.
- **3.5.1** If debris or residue are found during the visual inspection, recleaning and reinspection are mandatory until all residue, dust, and debris have been removed. Any residual debris that cannot be absolutely removed must be securely adhered to the substrate so that it may not be rendered airborne by any conceivable future building operations, renovations, maintenance, or demolition of the building.
- **3.5.2** The application of a sealer shall not be permitted until after all abated surfaces have passed visual inspections for completion of removal. Another visual inspection shall be conducted after the sealer has dried to confirm that all surfaces have been completely covered.
- **3.5.3** The final visual inspection shall be performed prior to clearance air sampling and with all the seals on windows, doors, and vents intact and the isolation barriers separating the work area from the adjacent areas in place.
- **3.6 AIR MONITORING REQUIREMENTS:** The Contractor's CIH shall be responsible for the development and implementation of an air monitoring program in accordance with OSHA Standard 29 CFR 1926.62, good industrial hygiene practices, and the requirements herein for gross removal. Air monitoring shall be performed by the CIH or by IHT(s) approved by the CIH. Documentation of air sampling shall include, as a minimum, calculations of minimum sample volume to achieve necessary detection limits; sampling times; sampling locations (with appropriate diagrams); evidence of periodic inspection of sampling equipment; documentation of daily pre- and post-calibration of sampling equipment; detailed description of work conditions and activities underway during the sampling period; description of worker protective devices; description of any atypical environmental conditions; and a description of

work practices, procedures, and controls in operation during the sampling period. Documentation of sample analysis shall include, as a minimum, sample identification; total sample duration; sample flow rate; the "Limit of Reliable Quantitation" (LRQ); total air volume; and blank filter analysis. Airborne concentration levels shall be calculated and reported at the 95 percent confidence level as per paragraph: METHOD OF SAMPLING AND ANALYSIS.

**3.6.1 Pre-Removal Area Monitoring:** Air samples shall be taken at least one day prior to cleaning and removal of furnishings or other items from LBP Control Areas and prior to masking and sealing operations, or prior to exterior LBP removal work. One air sample shall be taken per every five hundred (500) square feet within the LBP Control Area, but a minimum of one (1) air sample per discrete work area shall be taken. Air lead levels from these samples shall establish the reference background concentrations for each location where LBP is to be removed.

### **3.6.2 Monitoring During Removal Operations:**

- **3.6.2.1** At least one (1) full shift sample per work shift at each LBP work area from each of the following locations shall be taken during LBP removal and decontamination operations:
- **3.6.2.1.1** Personal Exposure Air Samples -- Inside the LBP Control Area during removal and cleanup operations;
- **3.6.2.1.2** Barrier/Perimeter Air Samples -- Immediately outside the LBP Control Area near all major openings to other building areas;
- **3.6.2.1.3** Environment Air Samples -- Downstream of negative air pressure exhaust or downwind of non`enclosed LBP Control Areas during removal operations.
- 3.6.2.1.4 Clean Room Air Samples -- Inside the Clean Room during removal and clean-up operations;

**NOTE**: Area air samples (Barrier, Environmental, and Clean Room) shall be positioned so that the filter cassettes are not unduly affected by air currents or dead air spaces, such as from the HEPA exhaust units or in a corner of a room.

- **3.6.2.2** Full-shift personal exposure air sampling of workers shall be performed to establish the 8-hour (TWA) exposure. Such sampling shall be conducted for each employee (or representative group of employees) expected to evidence the highest exposure in each work area for each type of activity on the first shift that removal, cleanup, or site preparation activities occur. Personal exposure sampling shall be repeated at least every third day for areas where removal and cleanup operations are conducted for more than 1 week, or at any time that conditions indicate to the Contractor or the CIH that the most recent personal sampling results are no longer indicative of employee exposure. The CIH shall notify the Contractor and the Contracting Officer immediately of any exposures to lead within the LBP Control Area, without regard to respiratory protection, in excess of the OSHA Action Level (AL).
- **3.6.3** Final Clearance Monitoring: At least 24 hours after final cleanup and decontamination following gross removal, remove the final polyethylene sheeting (leaving in place that polyethylene sheet covering opening exterior to the LBP Control Area, such as doors, windows, air ducts, etc.). Final clearance air monitoring shall be conducted inside the LBP Control Area for airborne Lead. This monitoring shall be performed following final visual inspections by the Contracting Officer and/or Contracting Officer's Representative and the Contractor's IHT or CIH. One air sample shall be taken per every 500 square feet within the LBP Control Area, but a minimum of one air sample shall be taken per discrete work area. Sample volumes shall be as specified in Paragraph 3.6.5, below. NOTE: Sample cassettes shall be positioned so that they are not unduly affected by air currents or dead spaces, such as from the HEPA exhaust units or in a corner of a room.
- **3.6.4** Final Clearance Action Levels: Air lead levels shall not exceed the limit of quantification for the sampling method (calculated at the 95 percent Confidence Level as per paragraph: METHOD OF SAMPLING AND ANALYSIS). Exceeding the Final Clearance Action Level constitutes evidence that cleanup has not been effectively accomplished, and the CIH shall immediately notify both the Contractor and the Contracting Officer of these results and recommend further specific corrective actions to be taken. The Contractor shall take immediate measures to

reclean the area to reduce the airborne Lead concentrations to the specified clearance level, as outlined above, at no additional cost to the Government. Following final inspections and clearance air monitoring, but before the LBP Control Area is turned over for unrestricted use (when personal protective equipment is no longer required for entry), the following statement shall be provided, signed, and dated (including ABIH certification number) by the CIH:

- "I hereby certify that abatement procedures, inspections, and air monitoring/sampling were performed in strict compliance with applicable standards and regulations, and these specifications. Based upon my assessment, this area is cleared for unrestricted entry."
- **3.6.5** Sampling Volumes and Rates: Sampling periods and volumes shall conform to National Institute for Occupational Safety and Health (NIOSH) Methods or OSHA 29 CFR 1926.62.
- **3.6.6** <u>Method of Sampling and Analysis</u>: Sampling protocol, including pump calibration, shall adhere to NIOSH or OSHA 29 CFR 1926.62 Methods and good industrial hygiene practices.
- **3.6.7** Quality Assurance Air Samples: The Contractor shall provide blanks and collect duplicate air samples to be analyzed by an independent laboratory for Government quality assurance (QA) purposes. The laboratory selected for QA purposes shall not be the laboratory used for analysis of the routine air samples collected on this project. Duplicate air samples and blanks shall be collected at a rate of 10 percent duplicates for all air monitoring conducted and one (1) blank per duplicate sample set, with the exception of final clearance air samples. All final clearance air samples shall be collected in duplicate and submitted with one blank. The Certified Industrial Hygienist shall evaluate the results of the Quality Assurance Air Samples by statistically comparing with other samples collected concurrently. This evaluation shall be documented in writing in the air monitoring reports.
- **3.7 SOIL SAMPLING:** The Government will have preabatement and post abatement soil samples taken at the worksites. If post abatement soil samples exceed the preabatement levels, the Contractor will be required to perform soil excavation to a depth of two inches in the area specified by the Contracting Officer at no additional cost to the Government. This excavated soil shall be treated as LBP contaminated waste and disposed of accordingly. The "Certificate of Analysis" for preabatement soil samples is included in Appendix B.
- **3.8 RECORDKEEPING:** The Contractor shall keep and maintain accurate records of (a) all air monitoring performed during this project in accordance with OSHA Standards 29 CFR 1926.62 and (b) the proper disposal of all LBP containing materials in accordance with EPA. The Contractor shall complete and return to the Contracting Officer within 15 working days after completion of all airborne LBP monitoring conducted under this contract, the following:
- **3.8.1** Negative air pressure readings, signed and dated, documented as per paragraph: AIR LEVELS AT THE WORK SITES.
- **3.8.2** Detailed air monitoring records, signed and dated, documented as per paragraph: AIR MONITORING REQUIREMENTS.
- **3.8.3** Proof of proper disposal (Waste Shipment Record) of all LBP or LBP contaminated materials, signed and dated.
- **3.8.4** Final clearance statement prepared by the Certified Industrial Hygienist, signed and dated, as per paragraph: FINAL CLEARANCE MONITORING.
- **3.8.5** ENG Form 4921 completed and signed by the Certified Industrial Hygienist.
- **3.9 TERMINATION:** Any disregard for the provisions of these specifications shall be deemed just and sufficient basis for termination for default of the Contractor (to include action by any Subcontractor), or will provide the basis

for the Government requiring the Contractor to remove a Subcontractor from the project, without cost to the Government and without compromise or prejudice to any other rights of the Government.

### **DIVISION 5 - METALS**

### SECTION 05500

### METAL FABRICATIONS

### PART 1 GENERAL

- **1.1 SCOPE**: The work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for the installation of metal fabrications required in this project.
- **1.2 APPLICABLE PUBLICATIONS**: The publications listed below form a part of this section to the extent referenced. Publications are referred to in the text by basic designation only. Publications shall be assumed to be the most current edition in effect at the time the contract is awarded.
- 1.2.1 American Society for Testing and Materials (ASTM) Publications:

A36/A36M Structural Steel.

### 1.2.2 American Welding Society (AWS) Publication:

D1.1 Structural Welding Code, Steel.

### 1.3 SUBMITTALS:

- **1.3.1** <u>List of Materials</u>: The Contractor shall submit a certified list of materials or manufacturer's descriptive literature for all major materials proposed for use in work under this section.
- **1.3.2** <u>Installation Instructions</u>: The Contractor shall submit manufacturer's written installation instructions.
- **1.3.3 Shop Drawings**: The Contractor shall submit shop drawings of the proposed installation of the manway.

### PART 2 PRODUCTS

- **2.1 MATERIALS**: Materials furnished under this section shall be standard products of manufacturers regularly engaged in the production of the items, and the most current design, which conforms, to the requirements specified.
- **2.2 MANWAY**: Manway shall be constructed to match existing type to fit new 30" opening size. Structural steel shall conform to ASTM A36/A36M.

### PART 3 EXECUTION

- **3.1 GENERAL**: The Contractor shall install metal fabrications as indicated on the plans and specified herein. The condition of the steel tank is known to be good without pits. If, however, a hole is found, and necessary repairs are required to be made prior to coating, welding shall be the means of repair.
- **3.2 INSTALLATION**: The installation of metal fabrications shall be accomplished in accordance with the fabrication manufacturer's written installation instructions and the Contractor's approved shop drawings.
- **3.3 WELDING**: Welding of structural steel shall be accomplished in accordance with American Welding Society (AWS) Publication, D1.1.
- **3.4 COATING**: Metal fabrications shall be primed and coated immediately following fabrication.

### **DIVISION 9 - FINISHES**

### SECTION 09913

### PIPING AND MISCELLANEOUS METAL COATING

### PART 1 GENERAL

- **1.1 SCOPE:** The work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for the accomplishment of the complete coating of the exterior surfaces of steel water pipelines, valves and miscellaneous metal surfaces required in this project.
- **1.2 APPLICABLE PUBLICATIONS:** The publications listed below form a part of this section to the extent referenced. Publications are referred to by basic designation only. Publications shall be assumed to be the most current edition in effect at the time a contract is awarded.

### 1.2.1 American Water Works Association (AWWA) Standards:

D102-97 Coating Steel Water-Storage Tanks.

# 1.2.2 Steel Structures Painting Council (SSPC) Publications:

PA1 Shop, Field and Maintenance Painting.

SP6 Commercial Blast Cleaning.

#### 1.3 SUBMITTALS:

- **1.3.1** <u>List of Materials</u>: The Contractor shall submit a certified list of materials or manufacturer's descriptive literature for all major materials proposed for use in work under this section.
- **1.3.2 Samples:** The Contractor shall submit color samples for selection of colors.
- **1.3.3 Application Instructions:** The Contractor shall submit manufacturer's written application instructions.

# PART 2 PRODUCTS

- **2.1 MATERIALS:** Materials furnished under this section shall be standard products of manufacturers regularly engaged in the production of the items, and the most current design, which conforms to the requirements specified.
- **2.2 COATINGS:** For all piping and valves located within the valve pit and miscellaneous metal surfaces to include the pit lid and frame, an "Outside Coating System No.5" as specified in AWWA D102-97 shall be applied. This is the same coating system that is to be applied to the exterior of the water storage tank. The first, intermediate and finish coats shall be applied by brushing or rolling. Spraying is not permitted. All requirements of this specification concerning mixing, thinning, application and spreading rates shall be followed. Application shall be in accordance with SSPC PA 1, "Shop, Field and Maintenance Painting".

### PART 3 EXECUTION

**3.1 SURFACE PREPARATION:** Exterior metal surfaces shall be cleaned free of mill scale, rust, old coatings and foreign matter by blast cleaning in accordance with SSPC SP6, "Commercial Blast Cleaning". All metal surfaces to be coated shall be cleaned free of rust and other foreign substances by brushing, vacuum cleaning, and/or blowdown with clean, dry compressed air prior to applying the first coat.

- **3.2 COAT APPLICATION:** All coatings shall be applied by skilled craftsmen in the trade and shall be placed in accordance with the manufacturer's written instructions. The Contractor shall apply any protection needed to prevent damage to surrounding equipment items. Any damage caused by surface preparation and/or coating operations shall be repaired or replaced with items of equal design and quality, approved by the Contracting Officer, at no additional cost to the Government. Any items showing existing damage prior to the Contractor's work shall be noted in writing by the Contractor and provided to the Contracting Officer prior to beginning work.
- **3.3 CLEANUP:** All rags and drop cloths, which constitute a fire hazard, shall be placed in closed metal containers and disposed of at the end of each work day. Upon completion of the work, all coating equipment, and coatings and waste containers shall be removed from the site and disposed of as specified. Coating drips, stray brush marks, or overspray on adjacent surfaces shall be removed, and the entire work area left clean and free of equipment and waste.

# **DIVISION 9 - FINISHES**

### SECTION 09940

### COATING ELEVATED STEEL WATER-STORAGE TANK

### PART 1 GENERAL

- **1.1 SCOPE:** The work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for the accomplishment of the complete coating of the interior and exterior surfaces required in this project.
- **1.2 APPLICABLE PUBLICATIONS:** The publications listed below form a part of this section to the extent referenced. Publications are referred to by basic designation only. Publications shall be assumed to be the most current edition in effect at the time a contract is awarded.

### 1.2.1 American Water Works Association (AWWA) Standards:

Chlorine.

C210-97 Standard for Liquid Epoxy Coating Systems for the Interior and Exterior of Steel Water Pipelines.

C652-92 Disinfection of Water-Storage Facilities.

D102-97 Coating Steel Water-Storage Tanks.

# 1.2.2 Federal Standards (FStd):

595 Colors.

# 1.2.3 Military Specifications (MS):

Mil-P-24441 General Specification for Paint, Epoxy-Polyamide.

# 1.2.4 Steel Structures Painting Council (SSPC) Publications:

PA1 Shop, Field and Maintenance Painting.

PS Guide 17.00 Guide for Selecting Urethane Painting Systems.

SP6 Commercial Blast Cleaning.

SP10 Near-White Blast Cleaning.

# 1.3 SUBMITTALS:

- **1.3.1** List of Materials: The Contractor shall submit a certified list of materials or manufacturer's descriptive literature for all major materials proposed for use in work under this section.
- **1.3.2** Samples: The Contractor shall submit color samples for selection of colors.
- **1.3.3 Application Instructions:** The Contractor shall submit manufacturer's written application instructions.

- **1.3.4 Quality Assurance:** Contractor shall submit test reports or certificates of compliance for all coatings, which require five gallons or more as specified in paragraph titled QUALITY ASSURANCE PROVISIONS.
- **1.4 DEFINITION:** Unless otherwise specified the term "coating," as used herein, refers to a liquid, powder, or mastic composition that has been converted to a solid, durable, and functional adherent film after application as a thin layer.

### **PART 2 PRODUCTS**

- **2.1 MATERIALS:** Material furnished under this section shall be standard products of manufacturers regularly engaged in the production of the items, and the most current formula, which conforms to the requirements specified.
- **2.2 COATINGS:** All coatings shall be in sealed containers that plainly show the designated name, formula or specification number, batch number, color, quantity involved, date of manufacture, manufacturer's formulation number, manufacturer's directions, and name of manufacturer, all of which shall be plainly legible at the time of use. Pigmented coatings shall be furnished in containers not larger than 5 gallons. Materials shall conform to the specifications as stated, and to the referenced publications. All coatings for this project shall be from the same manufacturer.
- **2.3 LIQUID CHLORINE:** Liquid chlorine shall conform to American Water Works Association (AWWA) Standard B301-92.
- **2.4 QUALITY ASSURANCE PROVISION:** Coatings proposed for use in this contract shall meet or exceed the specification requirements referenced herein. Coatings proposed for use shall be delivered and stored at the site or segregated at the source of supply, in sealed and labeled containers. Coatings shall be stored in a location and under such conditions that will prevent damage to the coatings by extremes of climate. The Contractor shall furnish either one of the following data for all batches in excess of five gallons:
- **2.4.1** A test report showing that the proposed batch met or exceeded all specification requirements.
- **2.4.2** A test report showing that a previous batch manufactured using the same formulation as that used in manufacturing that proposed batch met or exceeded all specification requirements, and a report showing test results on the proposed batch for the following properties for which there are requirements in the material specification: weight per gallon, viscosity, fineness of grind, drying time, color, and gloss.
- **2.4.3** Testing procedures and reports shall be as specified in AWWA C210-97. At the discretion of the Contracting Officer, samples may be taken and tested at any time by the Government. The Government may approve materials based on its own testing or materials may be approved for use based on the test reports furnished. If the materials are approved based on reports furnished by the Contractor, samples will be taken by the Government for testing should the materials appear to be defective during or after application. If the sample is tested by the Government and it fails to meet specification requirements, the materials represented by the sample shall be removed and replaced by the Contractor at the Contractor's expense, regardless of whether it is identified during or after application.

### PART 3 EXECUTION

- **3.1 CLEANING AND PREPARATION:** Hardware, hardware accessories, lighting fixtures, anodes and similar items near to or in contact with painted surfaces and not to be painted shall be removed, masked or otherwise protected prior to surface preparation and painting operations. Cathodic protection equipment in the metal water storage tank shall be removed, protected, maintained, placed back into operation, and recalibrated after coating and disinfecting each water storage unit. Sensor elements in each tank shall be removed and kept submerged in water during shutdown, to prevent deterioration. Miscellaneous items such as conduit, piping, mounting brackets, ladders, handrails, etc. shall be firmly attached to the structure and coated with water storage unit.
- 3.1.1 <u>Interior Surfaces to be Coated (Water Storage Compartments Only)</u>:

- **3.1.1.1** Forced Ventilation: Whenever surface preparation or coating operations include the use of volatile organic solvents, the enclosed space shall be made safe at all times from fire & explosion as determined by a calibrated explosimeter or organic vapor analyzer. During the coating operation, sufficient exhaust ventilation shall be provided to exchange the air in the enclosed spaces with fresh air at the rate of 5000 cubic feet/minute (cfm) for each spray gun in operation. All enclosed spaces shall be swept by moving air. Exhaust ducts shall discharge clear of working areas and away from sources of possible ignition. If ventilation fails, operations shall stop and the compartment evacuated until sufficient exhaust ventilation is provided.
- **3.1.1.2** <u>Blast Cleaning</u>: Interior ferrous metal surfaces shall be cleaned free of mill scale, rust, old paint, and foreign matter by blast cleaning in accordance with SSPC SP10, "Near-White Blast Cleaning".
- **3.1.1.3** Surface Protection: Within 8 hours after cleaning, but in any event prior to the deposition or formation of any detectable moisture, contaminants, or corrosion, all ferrous metal surfaces that have been blast cleaned shall be cleaned free of dust and abrasive particles by brushing, vacuum cleaning, and/or blowdown with clean, dry compressed air, and given the first coat of primer.
- 3.1.2 Exterior Surfaces to be Coated (and any Interior Surfaces Not in Water Storage Compartments):
- **3.1.2.1** <u>Blast Cleaning</u>: Exterior ferrous metal surfaces shall be cleaned free of mill scale, rust, old coatings and foreign matter by blast cleaning in accordance with SSPC SP6, "Commercial Blast Cleaning".
- **3.1.2.2** Surface Protection: Within 8 hours after cleaning, but in any event prior to the deposition or formation of any detectable moisture, contaminants, or corrosion, all ferrous metal surfaces that have been blast cleaned shall be cleaned free of dust and abrasive particles by brushing, vacuum cleaning, and/or blowdown with clean, dry compressed air, and given the first coat of primer.
- **3.2 COAT APPLICATION:** All work shall be done by skilled craftsmen in the trade. All materials shall be evenly spread, smoothly flowed on, and shall be free from runs, drops, ridges, waves, laps, brush marks and variations in color, texture and finish. Each coat shall be so applied as to produce a film of uniform thickness. Special attention shall be given to ensure that all surfaces including edges, corners, crevices, joints, welds and rivets receive a film thickness equivalent to that of adjacent painted surfaces. **Spray coating is not allowed for coating exterior surfaces.**
- **3.2.1** <u>Mixing and Thinning</u>: All coatings shall be mixed such that they are completely homogeneous in both color and texture. Multi-component paints shall be mixed in compliance with the manufacturer's recommendations. Normally coatings to be applied by brush will not require thinning; however, when thinning is required for proper application, it shall be done in strict compliance with the manufacturer's directions.
- **3.2.2** <u>Lines of Demarcation</u>: Lines of demarcation between points of different colors, if applicable, shall be carefully drawn, true, straight, and free from blurred or ragged edges.
- **3.2.3** Atmospheric Conditions: Coatings shall be applied to surfaces that are completely free of surface moisture as determined by touch. Unless otherwise specified while coating is being done, the temperature of the surfaces to be coated and of the atmosphere in contact therewith shall be at or above 50 degrees F. (10 degrees C.) for all water thinnable and two component type materials, and 45 degrees F. (7 degrees C.) for other coatings. During periods of cold weather, coating may be continued by applying artificial heat, provided the temperature requirements prescribed above are maintained. Unvented combustion type heaters will not be permitted. Coating will not be allowed when the temperature of the receiving surfaces exceeds 125 degrees F. (52 degrees C.).
- **3.2.4** Coating Progress: The application of successive coats of an epoxy coating system shall be applied as soon as the primers or first coats are sufficiently dry or cured in accordance with the coating manufacturer's recommendations. Additional coats shall be applied within the time limits, surface conditions, and temperature recommended by the manufacturer. If the period between coats is exceeded, then the Contractor shall obtain a repair

procedure from the coating manufacturer and the Contractor shall implement the manufacture's recommendations, at no additional expense to the Government.

**3.2.5** Scheduling of Operations: Coating operations shall be scheduled such that a minimum of disruption will be caused to the normal activities of the area. Downwind walkways, driveways, roads and parking areas shall be blocked as approved by the Contracting Officer's Representative. The Contractor shall coordinate with all residents and activities when areas need to be closed or blocked. This coordination shall be done prior to requesting approval by the Contracting Officer's Representative. The Contractor shall be liable for any damage, such as overspray, that occurs as a result of the Contractor's negligence.

# 3.2.6 Interior Surfaces to be Coated (Water Storage Compartments Only):

- **3.2.6.1** Coating System: All interior surfaces shall receive an "Inside Coating System No. 1" as specified in AWWA D102-97. This is a two-coat, two-component epoxy coating system. Both primer and finish coating applications shall be by spray and all requirements of this specification concerning mixing, thinning, application and spreading rates shall be followed. Application shall be in accordance with SSPC PA1, "Shop, Field and Maintenance Painting".
- **3.2.6.2** Primer Coat: The coating system shall consist of an anticorrosive two-component catalyzed epoxy material in accordance with ANSI/AWWA C210-97. The material shall have  $56.0\% \pm 2\%$  solids by volume. The range of volatile organic compounds shall be 3.02 3.08 pounds/gallon unthinned. All corners, angles, welds, rivets and other surface irregularities shall receive one additional primer coat. The succeeding coat shall not be applied until the primer is dry to the touch. The color of alternate coats shall provide contrast to assist in obtaining complete coverage.
- **3.2.6.3** <u>Finish Coat</u>: All primed interior surfaces shall receive a finish coat of the same epoxy coating as the primer. The finish coat shall be white.
- **3.2.6.4** Thickness Requirements: The primer shall be applied to produce a dry film thickness of a minimum of 3 mils. The finish coating shall be applied to produce a dry film thickness of a minimum of 5 mils. The total dry film thickness of all coats shall be not less than 8 mils at its thinnest point. If this thickness is not obtained in the specified number of coats, additional coats of the finish coating shall be applied to meet the minimum thickness requirement at no additional cost to the Government.
- **3.2.6.5** <u>Final Drying Time</u>: After the final coating has been applied, the tank shall remain open and forced ventilation shall be continued for a minimum of seven days at a minimum of 75°F (21°C) prior to being flooded with water.

# 3.2.7 Exterior Surfaces to be Painted (and any Interior Surfaces Not in Water Storage Compartments):

- **3.2.7.1** Coating System: All exterior surfaces shall receive an "Outside Coating System No.5" as specified in AWWA D102-97. This is a three-coat system consisting of a first coat and an intermediate coat of two-component catalyzed epoxy and a finish coat of a two-component aliphatic polyurethane coating. The first, intermediate and finish coats shall be applied by brushing or rolling. Spraying is not permitted. All requirements of this specification concerning mixing, thinning, application and spreading rates shall be followed. Application shall be in accordance with SSPC PA 1, "Shop, Field and Maintenance Painting."
- **3.2.7.2** First Coat: The two-component epoxy first coat shall be in accordance with MIL-P-24441, formulated with rust-inhibitive pigments, and include a green primer, Formula 150.
- **3.2.7.3** <u>Intermediate Coat</u>: The two-component epoxy intermediate coat shall be in accordance with MIL-P-24441 and consist of white Formula 152 tinted with appropriate pigment color to approximate the selected finish color. The

material shall have  $56.0\% \pm 2\%$  solids by volume. The range of volatile organic compounds shall be 3.02 - 3.08 pounds/gallon unthinned.

- **3.2.7.4** Finish Coat: The finish coat shall be a two-component aliphatic polyurethane coating conforming to Type V of SSPC PS Guide 17.00. The material shall have  $69.0\% \pm 2\%$  solids by volume. The range of volatile organic compounds shall be 2.20 2.40 pounds/gallon unthinned. The water storage tank shall be coated one solid color to match the "beige" on the existing tank. The Contracting Officer's Representative will make the color selection from a full range of the manufacturer's color samples submitted by the Contractor. Colors shall confirm to FStd 595 or the manufacturer's color chart.
- **3.2.7.5** Thickness Requirements: The first coat shall be applied to produce a minimum dry film thickness of 2 mils. The intermediate coat shall be applied to produce a minimum dry film thickness of 2 mils. The finish coat shall be applied to produce a minimum dry film thickness of 2 mils. The total dry film thickness of all coats shall be not less than 6 mils at its thinnest point. If this thickness is not obtained in the specified number of coats, additional coats of the finish coat shall be applied to meet the minimum thickness requirement at no additional cost to the Government.

### 3.3 MISCELLANEOUS WORK TO BE DONE:

- **3.3.1** <u>Lettering and Sign Painting</u>: Any painted symbols, gauges, lettering, or numbering found on the existing structure shall be repainted by the Contractor as directed by the Contracting Officer's Representative.
- **3.3.2** Removal of Vines and Trimming of Plantings: All vines and tentacles interfering with the contract work shall be removed from the exterior of the structure and hauled from the worksite. Ivy shall be removed in such a fashion that the remaining growth shall remain alive and connected to the root system. Ground plantings that are in actual contact with areas to be painted shall be trimmed in approved fashion to permit accomplishment of the contract work.
- **3.3.3** <u>Washing:</u> After the final work has been completed in the tank, but prior to any disinfecting operations, the inside of the tank shall be washed with clean water to remove all dust and overspray. Washing may take place during the final dry time provided the coating is sufficiently cured to withstand the abuse.
- **3.3.4** <u>Disinfection of Tank</u>: After coating and all other interior work have been completed, the tank shall be disinfected before it is put back into service. Disinfection shall conform to American Water Works Association (AWWA) Standard C652-92. The following procedure shall be followed: A solution of 200 milligrams per liter available chlorine shall be brushed or sprayed onto all parts of the storage facility which will be in contact with water up to the overflow level. Thoroughly coat all surfaces to be treated, including inlet and outlet piping and fill the pipes with water such that the available chlorine in the pipes is not less than 10 milligrams per liter. After a minimum of 30 minutes, purge the water from the pipes and fill the tank with potable water. Then, subject to satisfactory bacteriological testing and acceptable aesthetic quality (see 3.3.4.1), such water may be served to the distribution system.
- **3.3.4.1** Bacteriological Testing: Bacteriological testing shall be conducted by the Preventive Medicine staff of the Irwin Army Hospital at no cost to the Contractor. The Contractor shall notify the water lab staff and the Contracting Officer, not less than two weekdays nor more than two weeks in advance, of when the water storage tank is to be disinfected. The bacteriological test results must be negative. If coliform organisms are detected, the Contractor may take further samples until two consecutive samples are negative, or it shall repeat the disinfection process at no cost to the Government until the water in the storage facility meets the specified criteria.
- **3.3.4.2** <u>Aesthetic Quality</u>: Water suitable for distribution shall not be cloudy or discolored, and there shall be no offensive odors due to chlorine reactions or excess chlorine residual. If the water in the storage tank is found to be aesthetically unacceptable, the Contractor shall remedy the situation at no cost to the Government in a manner acceptable to the Government, subject to the approval of the Contracting Officer.

- **3.3.5** Trash Removal: Debris, rubble, and trash, including such material as empty/dry paint containers, cartons, dirty rags and waste shall be removed from the contract area daily (each work day). Accumulations will not be permitted. All such materials as described above may be deposited by the Contractor at the Construction/Demolition Landfill located on Fort Riley at no expense or optionally removed from the installation and properly discarded at no cost to the Government.
- **3.3.6** <u>Cleanup</u>: Upon completion of the work, staging, scaffolding, and containers shall be removed from the site or destroyed in an approved manner. Paint spots, oil or stains on adjacent surfaces shall be removed whether they resulted from work performed under this contract or had previously existed, and the entire job site shall be left in a clean condition.
- **3.3.7** <u>Facility Number</u>: Contractor shall remove the metal sign "Water Tower# 5200", and reinstall on completion of work.

# **DIVISION 16 - ELECTRICAL**

### **SECTION 16641**

# **CATHODIC PROTECTION (STEEL WATER TANKS)**

### PART 1 GENERAL

- **1.1 SCOPE**: Work covered by this section includes furnishing all plant, labor, equipment, materials, and transportation necessary for the installation, replacement and repair of cathodic protection system in steel water storage tank 5200.
- **1.2 APPLICABLE PUBLICATIONS**: Publications listed below form a part of this section to the extent referenced. Publications are referred to in the text by basic designation only. Assume publications to be the most current edition in effect at the time the contract is awarded.

### 1.2.1 American Society for Testing and Materials (ASTM) Publication:

D1248 Polyethylene Plastics.

# 1.2.2 <u>National Association of Corrosion Engineers (NACE) Recommended</u> Practices:

RP0169 Control of External Corrosion on Underground or Sub-merged Metallic Piping Systems.

RP0388 Impressed Current Cathodic Protection of Internal Sub-merged Surfaces of Steel Water Storage

Tanks.

# 1.2.3 National Electrical Manufacturers Association (NEMA) Publications:

TC2 Electrical Polyvinyl Chloride (PVC) Tubing (EPT).

WC5 Thermoplastic Insulated Wire and Cable.

# 1.2.4 National Fire Protection Association (NFPA) Publication:

70 National Electric Code (NEC).

# 1.2.5 Underwriters Laboratories (UL) Publications:

6 Rigid Metal Conduit.

510 Insulating Tape.

514A Metallic Outlet Boxes.

### 1.3 SUBMITTALS:

- **1.3.1** <u>List of Materials</u>: Submit a certified list of materials or manufacturer's descriptive literature for all major materials proposed for use in work under this section.
- **1.3.2** <u>Installation, Operation and Maintenance Instructions</u>: Submit manufacturer's written installation, operation and maintenance instructions.

- **1.3.3** Shop Drawings: Submit shop drawings of the proposed layout of the cathodic protection system. Shop drawings shall contain complete wiring and schematic diagrams and any other details required to demonstrate that the system has been coordinated and will function properly as a unit.
- 1.3.4 As-Built Drawings: Submit as-built drawings for all work performed under this section.
- 1.3.5 Test Results: Submit test results in booklet form tabulating all field test results and measurements performed.
- 1.3.6 Certification of the Corrosion Engineer or Technician: Submit certification of the Corrosion Engineer.
- **1.4 SERVICES OF A CORROSION ENGINEER:** Obtain the services of a Corrosion Engineer to supervise and inspect the installation of the cathodic protection system. The Corrosion Engineer shall be a person who, by reason of his knowledge of physical sciences and the principles of engineering and mathematics, acquired by professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried metallic piping systems. Such person shall be a licensed professional engineer, or a certified technician qualified by the National Association of Corrosion Engineers, and who has, in addition, certified suitable experience in corrosion control. The corrosion expert shall ensure that the cathodic protection system is installed, tested, and placed into service in accordance with specifications.

# **PART 2 PRODUCTS**

**2.1 MATERIALS**: Materials furnished under this section shall be standard products of manufacturer's regularly engaged in the production of the items, and the most current design, which conforms, to the requirements specified.

### 2.2 ANODES:

**2.2.1** <u>High Silicon Cast Iron Anodes</u>: Cast iron anodes shall be of the size indicated and shall conform to the following requirements:

# 2.2.1.1 Chemical Composition (Nominal Percent by Weight):

Element	Grade 1	Grade 2	
Silicon	14.20-14.75	14.20-14.75	
Manganese	1.50 max.	1.50 max.	
Carbon	0.70-1.10	0.75-1.15	
Chromium		3.25-5.00	
Iron	Balance	Balance	

**2.2.1.2** <u>Electrical Resistivity</u>: Seven hundred twenty nano-ohm-meter (Seventy-two microhm-centimeter) at minus 7 degrees C (20 degrees F).

# 2.2.1.3 Physical Properties (Nominal):

Tensile strength	103.4 MPa (15,000 psi)
Compressive strength	689.5 MPa (100,000 psi)
Brinell hardness	520
Density	7000 kilograms per cubic meter
Melting point	1260 degrees C (2300 degrees F)
Coefficient of	132 nanometer per degree C (73.3 expansion from 0 to nanometer per degree F)
	100 degrees C (32 to 212 degrees F)
Tensile strength	15,000 psi
Compressive strength	100,000 psi
Brinell hardness	520

Density 7.0 grams per cubic centimeter

Melting point 2300 degrees F

Coefficient of 0.00000733 centimeter per degree F expansion from 32 to 212 degrees

### 2.2.2 Miscellaneous Anodes:

2.2.2.1 Aluminum Anodes: Not Used.

**2.2.2.2 Precious Metal Anodes:** Precious metal anodes shall be solid composite.

**2.2.3** Anode Connecting Cables: Anodes shall have connecting cables installed at the factory. The Contractor shall submit a certified test report showing that the connecting method has passed a 120-day laboratory test without failure at the place of connection wherein the anode was subjected to maximum recommended current output while immersed in a 3 percent sodium chloride solution. Aluminum anodes connected together by a threaded system shall have water-tight seals and be electrically continuous.

#### 2.3 MISCELLANEOUS MATERIALS:

- **2.3.1** Reference Electrodes: The electrodes shall be copper-copper sulfate type provided with micro-pore diffusion window for water contact and water-tight plug for renewal of copper sulfate crystals and solution.
- **2.3.2** <u>Automatic Cathodic Protection Control</u>: The system shall be capable of maintaining a tank-to-water potential criterion of protection within plus or minus 0.025 volt regardless of changes in water chemistry, temperature, or water level in the tank. Provision shall be made for readily changing the range and limits of the criterion.

# 2.3.3 Electrical Wire and Associated Materials:

- **2.3.3.1** Anode Connecting Wire: Anode connecting wire shall be No. 8 AWG stranded copper wire with type CP high molecular weight polyethylene insulation, 2.8 mm (7/64 inch) thick, 600 volt rating, in accordance with NEMA WC5. Cable-to-anode contact resistance shall be 0.003 ohms maximum.
- **2.3.3.2** <u>Anode Header Cable</u>: Cable for anode header and distribution shall be No. 8 AWG stranded copper wire with type CP high molecular weight polyethylene, 2.8 mm (7/64 inch) thick insulation, 600-volt rating, in accordance with NEMA WC5.
- **2.3.3.3 Reference Electrode Wire:** Reference electrode wire shall be stranded copper wire with NFPA 70 type RHW-USE or polyethylene insulation.
- **2.3.4** Conduit: Rigid galvanized steel conduit and accessories shall conform to UL 6. Nonmetallic conduit shall conform to NEMA TC 2.
- 2.3.5 Junction Boxes: Boxes shall be outdoor type conforming to UL 514A.
- **2.3.6 Polyethylene Insulation:** Polyethylene insulation shall comply with the requirements of ASTM D1248 and of the following types, classes, and grades:
- **2.3.6.1** <u>High Molecular Weight Polyethylene</u>: High molecular weight polyethylene shall be Type I, Class C, Grade E5.
- **2.3.6.2 High Density Polyethylene:** High density polyethylene shall be Type III, Class C, Grade E3.
- **2.3.7** Pressure-Sensitive Vinyl Plastic Electrical Tape: Tape shall conform to UL 510.

- **2.4 DIELECTRIC SEALING COMPOUND:** Sealing and dielectric compound shall be black rubber based compound that is soft, permanently pliable, tacky and mold-able. The compound shall be applied as recommended by the manufacturer and not less than ½-inch thick. Coating compound shall be a manufacturer's standard product with Corrosion Engineer approved pipe wiring.
- 2.5 ELECTRICALLY INSULATING PIPE JOINTS: Electrically insulated pipe joints shall be:
- **2.5.1** Flexible, mechanical pipe couplings of an electrically insulating type consisting of bolted or compression design provided with electrically insulating joint harness if required to provide pull-out strength.
- **2.5.2** Flexible, integral electrically insulating pipe couplings designed for field installation by means of a swaging system and providing pull-out strength with a factor of safety.
- **2.5.3** Non-flexible flanged type electrically insulating pipe joints to be field assembled.
- **2.5.4** Non-flexible factory assembled electrically insulating pipe joints designed with stub ends for installation by welding and providing pull-out strength with a safety factor.
- **2.5.5** Threaded type electrically insulating pipe joints shall have molded plastic crew threads and be used above ground only. Machined plastic screw threads shall not be used.
- **2.5.6** Electrically insulating pipe joints shall be of a type that is in regular factory production.
- **2.5.7** Electrically conductive couplings shall be of a type that has a published maximum electrical resistance rating given in the manufacturer's literature.
- **2.5.8** Casing Centering Cradles and Casing Seals shall be of a type that is in regular factory production made for the purpose of electrically insulating the carrier pipe from the casing and preventing the incursion of water into the annular space.

### PART 3 EXECUTION

- **3.1 GENERAL**: The Contractor shall inspect and make repairs to the existing cathodic protection system in water storage tank 5200. Repairs shall include replacement of defective and worn out system components. The Contractor shall diagram placement of the existing cathodic protection system before removal. The Contractor shall take proper care of the existing cathodic protection system components while removed from the tanks. Sensors will not be allowed to dry out.
- **3.2 INSTALLATION**: Installation, replacement and repair of cathodic protection systems shall be accomplished in accordance with NACE RP0169, NACE RP0388, NFPA 70, and applicable manufacturers' written installation instructions, the Contractor's approved shop drawings, the Corrosion Engineer's recommendations, and the requirements herein.

# 3.3 ANODES:

**3.3.1** Anode Installation: Anodes shall be suspended to prevent icing damage to anodes and suspending cables. The Contractor shall certify that the method has been used successfully for similar applications. Anodes shall be suspended from roof by means of factory installed connecting wire designed to support the anodes in air (before submergence) without failure of the electrical wire insulation or the electrical conductor. Anodes shall be suspended in a way that will prevent contact with tank surfaces and shall be hung clear of man-access roof hatches and such items as ladders, heater pipes, and stay rods. Anode hangers shall electrically insulate the anode suspending wire from the tank steel. A handhole having a minimum diameter of 150 mm (6 inches) shall be provided in the tank roof for each anode string to permit replacement or inspection of anodes.

**3.3.2** Anode Connections: Anodes shall be electrically connected to the positive dc header cable with compression connectors or split bolts, or the header cable may terminate in a junction box for connection with all anode cables. A minimum of two split bolts shall be used for each connection if split bolts are used. Header cable shall be installed on the underside of the roof with electrically insulating hangers and shall enter the tank near the roof line from an externally mounted junction box. External wiring shall be in conduit. All under-roof electric wire splices shall be made above the high water line and sealed water tight using a minimum of two 1/2-lap layers of butyl rubber tape followed by two 1/2-lap layers of plastic tape.

### 3.4 PERMANENT REFERENCE ELECTRODES:

- **3.4.1** <u>Calibration</u>: Permanent reference electrodes shall be calibrated against a standard electrode before installation. Calibration shall be done in a test tank containing water with the same composition as the tank to be protected. The permanent electrodes shall measure reference voltage agreeing with that measured by the standard electrode within plus or minus 0.005 volt when the sensing windows of the two electrodes being compared are not more than 4.2 mm (1/6 inch) apart but not touching.
- **3.4.2** <u>Installation</u>: Reference electrodes shall be operable under the same icing conditions as the anode system. Installation of permanent reference electrodes shall be made at points in the tank which will monitor minimum and maximum tank-to-water potentials and as otherwise needed for automatic control system. Sensing windows of reference electrodes shall be located between 6.4 mm (1/4 inch) and 12.7 mm (1/2 inch) away from the steel surface sensed and shall be fixed in position preventing contact with tank steel.

### 3.5 CRITERIA OF PROTECTION:

- **3.5.1** <u>Minimum</u>: The criterion of protection shall be a negative voltage of at least minus 0.85 volt as measured between the tank and a saturated copper-copper-sulfate reference electrode. Determination of this voltage shall be made with the cathodic protection system in operation.
- **3.5.2** <u>Maximum</u>: In order to mitigate disbonding of the interior coating in the tank, potential between a copper-copper-sulfate reference electrode and the tank at any point shall not be more negative than minus 1.1 volt measured with the electrode located between 6.4 mm (1/4 inch) and 12.7mm (1/2 inch) and away from the steel surface but not touching it.

# 3.6 TESTING, ADJUSTING, AND PLACING IN SERVICE:

- **3.6.1** <u>Testing</u>: Upon completion of the installation, the tank shall be filled to maximum working level. The rectifier shall be energized and adjusted to provide current to the anodes at the level that will protect the tank. The measurements detailed below shall be made with voltmeters having a sensitivity not less than 100,000 ohms per volt.
- **3.6.1.1** <u>Tank-to-Water Potential Measurements</u>: The following series of tank-to-water potential measurements with a portable reference electrode placed not more than 12.7 mm (1/2 inch) away from but not touching the tank wall shall be performed:
- **3.6.1.1.1** On a vertical line midway between two anode strings beginning at a point 300 mm (1 foot) below water level and continuing at points 900 mm (3 feet) apart until the bottom of the tank is reached.
- **3.6.1.1.2** On a second vertical line midway between two anode strings on the opposite side of the tank from the first vertical line beginning at a point 300 mm (1 foot) below water level and continuing at points 900 mm (3 feet) apart until the bottom of the tank is reached.
- **3.6.1.1.3** Across the bottom of the tank in a line between the two vertical lines at 900 mm (3 foot) intervals.
- **3.6.1.1.4** In at least four places which are closest to anodes.

- **3.6.1.2** Reference Electrode Calibration: The portable reference electrode used for the test shall be calibrated against the standard electrode specified in paragraph PERMANENT REFERENCE ELECTRODES.
- **3.6.1.3** <u>Test Measurement Recording</u>: All test measurements and their locations, as well as measurements made with the permanent electrodes simultaneously with the test measurements, shall be recorded.
- **3.6.2** <u>Adjusting</u>: Final adjustment of the rectifier output current shall be made so that repeated voltage readings taken as specified for testing meet the criteria in paragraph CRITERIA OF PROTECTION.
- **3.6.3** <u>Placing in Service</u>: After final adjustment the cathodic protection system shall be placed in service and the condition of the system as left by the Contractor shall be recorded and shall indicate transformer tap settings; voltage readings from reference electrode to tank, readings both horizontal and vertical; automatic control differential setting; ac supply voltage; adjusted dc output voltage; and total protective current.
- **3.6.4** <u>Records</u>: Copies of all recorded information from this section shall be sent to Operations and Maintenance Division, Bldg 337, Public Works, Fort Riley, KS.
- **3.6.5 TRAINING**: The Contractor shall conduct a training course for the operating staff as designated by the Contracting Officer. The training period shall consist of a total of 4 hours of normal working time and shall start after the cathodic protection system is functionally complete but prior to final acceptance tests. The field instructions shall cover all of the items contained in the operating and maintenance instructions, as well as demonstrations of routine maintenance operations. The Contracting Officer's Representative shall be notified at least 14 days prior to date of proposed conduction of the training course. As a minimum, this training shall include the following:
  - 1. Equipment used for taking readings and how it operates.
  - 2. How often readings should be taken.
  - 3. What is considered the normal range of the readings.
  - 4. How to adjust the system if it is out of tolerance.

# Section F - Deliveries or Performance

# DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	180 dys. ADC	1	PUBLIC WORKS ROGER WILLIAMS EP S DIV, JOC BRANCH BLDG 408 FORT RILEY KS 66442 785-239-2944 FOB: Destination	DDFAES
0002	10 dys. ADC	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	DDFAES

NOTES
Notes to Bid Schedule
THIS SECTION MUST BE FILLED OUT AND RETURNED WITH BID.
Preferred method of payment is by Government Commercial Purchase Card although <b>not mandatory</b> to bid.
Selection of Payment
The offeror agrees to accept the Government Commercial Purchase Card.
YesNo
If the contractor accepts the Government Commercial Purchase Card as the method of payment:
(1) The use of the Government Commercial Purchase Card will result in no additional charges above the pricing indicated on the bid schedule.
(2) All invoices shall be submitted electronically to <u>docinvoices@riley.army.mil</u> or faxed to appropriate contract administrator if offeror does not have e-mail capability. The fax number is 785-239-6743. The contractor will be notified telephonically by the Government within 5 working days from receipt of receiving report (proof of delivery or service completed) from the activity with respect to payment.
If the contractor does not elect to receive payment by Government Commercial Purchase Card, payment will be by Electronic Fund Transfer (EFT). See Clause 52.232-33.
Payment Discounts
The contractor may agree to a discount offered to the Government for prompt payment. See 52.212-4 (i) Payment, for discount payment information. Make a selection below if you agree or do not agree.
Yes, contractor agrees to offer the Government a prompt payment discount of
No, contractor does not agree to offer the Government any discounts for prompt payment.
VENDOR NAME:
NAME/TITLE:

SIGNATURE:\_\_\_\_\_ DATE:\_\_\_\_

TAX ID: \_\_\_\_\_

### ADDITIONAL INFORMATION

### IMPORTANT DELIVERY INFORMATION

At the present time and until further notice ALL delivery trucks must enter Fort Riley, KS through the 12<sup>th</sup> Street entrance into Camp Funston. This is the **ONLY** entrance deliver trucks may use. You may access the 12<sup>th</sup> Street gate from KS Highway 18, North of the Kansas River bridge. If you are traveling on I-70, 12<sup>th</sup> Street is accessible from I-70 Exit 303. All Drivers and passengers must be prepared to present a valid Driver's License/photo ID, current vehicle registration, and proof of insurance.

# \*\* NOTE: NO DELIVERIES ARE ACCEPTED AFTER 3:30 PM (CST)

# INVOICE REQUIREMENTS

Please refer to Order/Contract Number on all correspondence, invoices, shipping documents, shipping labels and shipping containers.

Failure to follow this guidance WILL RESULT DELAY OF PAYMENT.

# PROPER INVOICE INFORMATION

If the following information does not appear on your invoice, the pay station <u>will</u> return your invoice for correction and payment <u>will be</u> delayed.

- \* Name and address of vendor or contractor.
- \* Invoice date, invoice number, account number, and/or other identifying number agreed to by contract.
- \* Government contract number. Include delivery order number if applicable.
- \* Contract line item number (CLIN), description, price, quantity of goods and/or services rendered, unit of measure, unit price and extended price of the items delivered or services rendered.
- \* Shipping information (unless mutually agreed that this information is only required in the contract). Include shipping number and date of shipment. If shipped on Government bill of lading, include the bill of lading number and weight of shipment.
- \* Payment terms (unless mutually agreed that this information is only required in the contract) Terms of any discount for prompt payment offered.
- \* Contact name, title and telephone number to notify in event of defective invoice.
- \* Other substantiating documentation or information required by the contract.

You must be registered in the Central Contractor Registration (CCR) database and registration must be kept current.

This information for submission of a proper invoice can be found at FAR clause 52.212-4 and the following web site: <a href="http://www.access.gpo.gov/nara/cfr/waisidx\_01/5cfr1315\_01.html">http://www.access.gpo.gov/nara/cfr/waisidx\_01/5cfr1315\_01.html</a>

# **VENDOR PAY INFORMATION**

a. Any vendor wishing to check the status of invoices submitted for payment to DFAS Lawton-Ft Sill OPLOC may do so via www at it's site "DFAS Lane" at http://www.dfas.mil. The use of this service requires a contract number, a

delivery order number (if applicable) and invoice number.

b. Vendor Pay at DFAS Lawton-Fort Sill OPLOC also has a toll free telephone number. Vendors may call 1-888-445-5154 to reach Vendor Pay's Customer Service Section and also to request an Electronic Funds Transfer (EFT) form.

### CLAUSES INCORPORATED BY FULL TEXT

# 52.000-4005 INVOICES AND PAYMENTS

- a. The Contractor shall submit an original invoice to Public Works, ATTN: Inspection Branch, Building 408, Fort Riley, KS 66442. Invoices shall cite the following: name of vendor; invoice date; the contract number; delivery order number, if applicable; vendor invoice number and/or account number; description, including contract line item number, sub line item number, price and quantity; shipping and payment terms; contact name, title and telephone number of point of contact of the vendor; and other substantiating documentation or information required by the contract, if applicable.
  - b. Payment will be made by government credit card or DFAS, Lawton-Fort Sill OPLOC.

# 252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

# 52.0000-4505 VENDOR PAY INFORMATION

- a. Any vendors wishing to check the status of invoices submitted for payment to DFAS Lawton-Fort Sill OPLOC may do so via the World Wide Web at its site "DFAS Lane" located at http://www.dfas.mil. The use of this service requires a contract number, a delivery order number (if applicable) and an invoice number.
- b. Vendor Pay at DFAS Lawton-Fort Sill OPLOC also has a toll free telephone number. Vendors may call 1-888-445-5154 to reach Vendor Pay's Customer Service Section and to request an Electronic Funds Transfer (EFT) form.

### Section H - Special Contract Requirements

### CLAUSES INCORPORATED BY FULL TEXT

# 52.000-4000 ALTERNATE DISPUTES RESOLUTION

In furtherance of Federal policy and the Administrative Dispute Resolution Act of 1990 (ADR Act), Public Law 101-552 and FAR Clause 52.233-1, Subparagraph (d) (2) (1) (B) (2), the Contracting Officer will try to resolve all post award acquisition issues in controversy by mutual agreement of both parties. Interested parties are encouraged to use alternative dispute resolution procedures to the maximum extent practicable, in accordance with the authority and requirements of the ADR Act.

### 52.000-4006 MATERIAL APPROVAL SUBMITTALS

- a. Any material submittals required by FAR clause 52.236-5 entitled, "Materials and Workmanship", and requested deviations from the Technical Provisions shall be submitted on ENG Form 4025-R, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certifications". Required certificates, manufacturing brochures, etc., shall be submitted in four (4) copies unless otherwise specified. The Contractor shall submit one sample when approval is required. Submittals requiring manufacturer's certifications must be executed by an officer of the manufacturing company and notarized. Approval of materials or equipment not noted as a deviation shall not relieve the Contractor from complying with the applicable Technical Provisions.
- b. Testing. Required tests shall be performed by the Contractor. If any sample fails to meet specification requirements, the materials represented by the sample shall be replaced with materials which meet specifications. Any retesting costs shall be borne by the Contractor. Samples shall be clearly identified. The Government reserves the right to sample and test materials for compliance with appropriate specifications.

# 52.000-4010 PRE-FINAL AND FINAL INSPECTION

- a. The Contractor and Government Inspector shall conduct a joint pre-final inspection prior to requesting a final inspection. Any discrepancies noted shall be corrected prior to the final inspection. The Contracting Officer may schedule more than one pre-final inspection if determined necessary.
- b. The Contractor shall request final inspection in writing to the Contracting Officer ten days before the desired date. The final inspection shall be performed with the Contractor, Government personnel and representatives of the using activity. Any discrepancies noted shall be corrected prior to final payment.

### 52.000-4014 WAGE DETERMINATION

General Decision Number: KS030026 01/30/2004

General Decision Number: KS030026 01/30/2004 Superseded General Decision Number: KS020026

State: Kansas

Construction Type: **Building** County: Clay County in **Kansas**.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and

apartments

up to and including 4 stories)

Modification Number Publication Date

0 06/13/2003 1 01/30/2004

### ASBE0027-004 10/01/1999

Rates Fringes

Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and

finishings to all types of

mechanical systems)......\$ 14.52 4.14

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# BOIL0083-001 09/01/2001

Rates Fringes

Boilermaker.....\$ 25.01 11.14

.....

### BRKS0003-001 04/01/2003

CHASE, CLAY, COFFEY, GEARY, GREENWOOD, JACKSON, JEFFERSON, LYON, MARION, MARSHALL, MORRIS, NEMAHA, OSAGE, POTTAWATOMIE,

RILEY, SHAWNEE, WABAUNSEE, AND WASHINGTON COUNTIES:

Rates Fringes
Bricklayer.....\$ 23.76 5.95

BRKS0004-002 04/01/1996

Rates Fringes

Marble, Tile Layer &

Terrazzo Worker.....\$ 19.50

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### CARP0918-001 04/01/1999

Rates Fringes Carpenters: **Buildings** over 10 stories.....\$ 15.03 3.64 **Buildings** under 10 stories.....\$ 13.28 3.39 Millwright **Buildings** over 10 stories.....\$ 16.28 3.64 **Buildings** under 10 3.39 stories.....\$ 14.53

ELEC0661-002 03/01/2003

Rates Fringes
Electricians: Jobs where the combined labor and material electrical estimated cost (time and material or bid contract) does not exceed \$50,000\$ 22.25 13%+ 2.34
Jobs where the combined labor and material electrical estimated cost (time and material or bid contract) is at least \$50,000\$ 23.35 13%+ 2.34
ENGI0101-002 04/01/2003 ANDERSON,ATCHISON,BROWN,CHASE,CHEYENNE,CLAY,CLOUD,COFFEY, DECATUR,DICKINSON,DONIPHAN,ELLIS,ELLSWORTH,FRANKLIN,GEARY, GOVE,GRAHAM,JACKSON,JEFFERSON,JEWELL,LINCOLN,LOGAN,LYON, MARION,MARSHALL,MITCHELL,MORRIS,NEMAHA,NORTON,OSAGE,OSBORNE, OTTAWA,PHILLIPS,POTTAWATOMIE,RAWLINS,REPUBLIC,RILEY,ROOKS, RUSSELL,SALINE,SHERIDAN,SHERMAN,SMITH,THOMAS,TREGO,WABAUNSEE, WALLACE & WASHINGTON COUNTIES: Rates Fringes
Power equipment operators:  GROUP 1\$ 22.80 7.82  GROUP 2\$ 22.30 7.82  GROUP 3\$ 22.05 7.82  GROUP 4\$ 21.50 7.82  GROUP 5\$ 21.10 7.82  POWER EQUIPMENT OPERATORS CLASSIFICATIONS  GROUP 1: Cranes with lifting ring  GROUP 2: Cranes -Booms 200'& over, Tower Cranes  GROUP 3: Cranes-100'of boom or over including jib or 30 tons or over 2 yard capacity  GROUP 4: Truck Crane, Backhoe  GROUP 5: Barber-Greene Loader or similar type, Bob Cat/  Hi-Loaders (one yard and under), Fork Lift
* IRON0606-005 07/01/2003  Rates Fringes  Ironworker\$ 18.28 6.06
LABO1290-001 04/01/1996  Rates Fringes  Laborer, General\$ 9.30 3.30
LABO1290-009 04/01/2000  Rates Fringes  Asbestos  Abatement/Hazardous Waste  Preparation, removal and encapsulation of hazardous materials from non-mechanical systems
PAIN0558-003 08/01/2001  Rates Fringes  Glazier\$ 18.21 8.02

PAIN1179-001 04/01/2001 Rates Fringes Soft Floor Layer...... \$ 19.93 4.54 PLAS0044-001 04/01/1997 Rates Fringes Cement Mason.....\$ 14.40 2.95 PLUM0165-001 01/01/2003 Rates Fringes Plumber.....\$ 25.04 8.05 ROOF0020-010 06/01/2003 Rates Fringes Roofer.....\$ 17.13 \* SFKS0669-001 01/01/2004 Rates Fringes Sprinkler Fitter.....\$ 28.31 7.15 SHEE0077-001 06/01/2001 Rates Fringes Sheet metal worker.....\$ 23.58 7.34 SUKS1982-002 01/01/1982 Rates Fringes Painters: BRUSH, ROLLER, SPRAY......\$ 14.44 TAPERS.....\$ 14.89 WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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# WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_

END OF GENERAL DECISION

# 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 180 days after receipt of notice to proceed. The time stated for completion shall include final cleanup of the premises.

(End of clause)

# 52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 20 percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

# 252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

- (a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- (b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

#### 52.0000-4019 MISCELLANEOUS NOTES

- a. CONDITIONS OF OCCUPANCY: The building(s) included in this project may be occupied throughout the course of the work. Adequate protection of persons and property shall be provided at all times. The work shall proceed in such a manner as to prevent undue spread of dust and flying particles. Any damage or undue spread of dust or flying particles caused by the Contractor, his employees, his subcontractors and/or their employees, to Government or personal property and/or equipment within the buildings shall be repaired, replaced or corrected by the Contractor at no additional expense to the Government. The Contractor shall obtain approval from the Contracting Officer, or his designated representative, for entry and exit to/from the buildings.
- b. Publications referenced in the specifications are available for inspection and use at the Public Works, Plans and Service Division, Building 408, Fort Riley, Kansas 66442.
- c. Plans show the general layout and configuration of the existing buildings and site conditions. However, due to construction inaccuracies, dimensions may vary slightly from those shown. Fabrication of any component requiring close tolerances and accurate fit will require field verification of dimensions to assure satisfactory results.

As built drawings of most buildings are available for review at the Public Works, Plans and Services Division, Building 408, Fort Riley, KS 66442.

### 52.0000-4026 DESIGNATION OF TECHNICAL REPRESENTATIVE

The Director of Public Works, or his designee, located in Building No. 408, Fort Riley, Kansas, is designated as the Contracting Officer's Representative (COR) for the purpose of technical surveillance of workmanship and inspection of materials for work being performed under this contract. No inspector is authorized to change any provision of the specifications without written authorization of the Contracting Officer, nor shall the presence or absence of an inspector relieve the Contractor from any requirements of the contract.

Increases to contract price resulting from COR/Contractor field change discussions and unauthorized by the Contracting Officer are at the Contractor's risk and expense.

(End of Provision)

### 52.0000-4217 EMERGENCY MEDICAL TREATMENT

In accordance with AR 40-3, emergency medical treatment for Contractor's employees will be provided by Irwin Army Community Hospital in order to prevent undue suffering or loss of life. Emergencies will be treated only during the period of the emergency and appropriate action will be taken to discharge or transfer patients as soon as the emergency period ends. Charges to the Contractor for stated medical care will be at the prevailing inpatient or outpatient rate, whichever is applicable.

### 52.000-4352 APPROVALS BY GOVERNMENT

Unless expressly stipulated elsewhere in this contract as being excepted from this provision, wherever this contract provides for submittal of plans, designs, components, or other items for approval of the Contracting Officer, such approvals shall not be construed as a complete check as to the adequacy of the submittal, nor as an agreement that the submittal will meet the requirements of the contract. Such approvals shall in no way relieve the Contractor of the responsibility of meeting all the requirements of the contract.

# 52.0000-4354 RELATIONSHIP BETWEEN GOVERNMENT, CONTRACTOR AND CONTRACTOR PERSONNEL

- a. The Government and the Contractor understand and agree that the services to be delivered under this contract by the Contractor to the Government are non-personal services, and the parties recognize and agree that no employer-employee or master servant relationship exists or will exist under the contract between the Government and the Contractor and/or between the Government and the Contractor's personnel. The Contractor personnel shall be responsible, not to the Government, but solely to the Contractor, who, in turn, shall be accountable to the Government.
- b. The Government will not exercise any supervision or control over Contractor personnel performing services under this contract. Contractor personnel shall not be placed under the supervision, direction, or evaluation of a Federal Officer, military or civilian, in connection with performance under this contract.
- c. Rules, regulations, directives, and requirements which are issued during the contract term by Department of Army and local Provost Marshal activities under their responsibility for law and order, administration and security on the installation shall be applicable to all contractor personnel or representatives who enter the installation, or who travel on Government transportation. This requirement shall not be construed or interpreted to establish any degree of Government control which is consistent with the intent of a personal services contract. Contractor personnel or representatives shall be subject to such checks as may be deemed necessary to assure that their presence on the installation does not violate these requirements. No employee will be permitted on the installation when such a check reveals that his presence would be detrimental to the security of the installation or the accomplishment of work. When directed by the Contracting Officer, the Contractor shall remove any employee from an assignment to perform services under this contract for reasons of misconduct or breaches of security in connection with his or her employment. Removal of an employee does not relieve the Contractor of his responsibility to perform the requirements specified within this contract. In other instances, the Contractor shall take appropriate personnel action as required in the event of employee misconduct in connection with his or her employment.
- d. The services to be performed under this contract shall not require the Contractor or his employee to exercise personal judgment and discretion on behalf of the Government, but rather, the Contractor's employees shall act and exercise personal judgment and discretion on behalf of the Contractor.

e. Contractor and Contractor personnel shall not be considered employees of the Federal Government and shall not be eligible, by virtue of performance under this contract, for payment by the Government of entitlements and benefits accorded federal employees.

# 52.0000-4358 INSURANCE

Before commencing on-site operations, the Contractor shall provide the Contracting Officer evidence of the following

insurance coverage. All coverage shall be maintained throughout the contract period. All subcontracts shall provide the same coverage.

- a. Statutory worker's compensation and employer's liability insurance: \$100,000 or as prescribed by State of Kansas, whichever is greater.
- b. General liability Bodily injury liability insurance: \$500,000 per occurrence.
- c. Vehicle liability (comprehensive): \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. Bodily injury liability and property damage liability shall cover the operation of all automobiles, trucks, vehicles and other mobile equipment used in connection with the performance of the contract.

# Section I - Contract Clauses

# CLAUSES INCORPORATED BY REFERENCE

52.202-1 Alt I	Definitions (Dec 2001) Alternate I	MAY 2001
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or	
32.203 0	Improper Activity	101111 1777
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal	JUN 2003
02.200 12	Transactions	2002
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting	JUL 1995
32.207 0	With Contractors Debarred, Suspended, or Proposed for	002 1770
	Debarment	
52.214-26	Audit and RecordsSealed Bidding	OCT 1997
		OCT 1997
52.214-27	Price Reduction for Defective Cost or Pricing Data -	OCT 1997
50.014.00	Modifications - Sealed Bidding	OCT 1007
52.214-28	Subcontracting Cost Or Pricing DataModificationsSealed	OCT 1997
	Bidding	
52.214-29	Order Of PrecedenceSealed Bidding	JAN 1986
52.219-8	Utilization of Small Business Concerns	OCT 2000
52.219-9 Alt I	Small Business Subcontracting Plan (Jan 2002) Alternate I	OCT 2001
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime	SEP 2000
	Compensation	
52.222-6	Davis Bacon Act	FEB 1995
52.222-7	Withholding of Funds	FEB 1988
52.222-8	Payrolls and Basic Records	FEB 1988
52.222-9	Apprentices and Trainees	FEB 1988
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	FEB 1988
52.222-12	Contract Termination-Debarment	FEB 1988
52.222-12	Compliance with Davis-Bacon and Related Act Regulations.	FEB 1988
52.222-13	•	FEB 1988
	Disputes Concerning Labor Standards	
52.222-15	Certification of Eligibility	FEB 1988
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-23	Notice of Requirement for Affirmative Action to Ensure	FEB 1999
	Equal Employment Opportunity for Construction	
52.222-26	Equal Opportunity	APR 2002
52.222-27	Affirmative Action Compliance Requirements for	FEB 1999
	Construction	
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans	DEC 2001
	of the Vietnam Era, and Other Eligible Veterans	
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans	DEC 2001
	Of The Vietnam Era, and Other Eligible Veterans	
52.223-3	Hazardous Material Identification And Material Safety Data	JAN 1997
52.223-5	Pollution Prevention and Right-to-Know Information	AUG 2003
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50 000 6	D F W. 1 . 1	MAN 2001
52.223-6	Drug-Free Workplace	MAY 2001
52.223-11	Ozone-Depleting Substances	MAY 2001
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-13	Restrictions on Certain Foreign Purchases	JAN 2004
52.226-1	Utilization Of Indian Organizations And Indian-Owned Economic Enterprises	JUN 2000
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	AUG 1996
52.227-4	Patent Indemnity-Construction Contracts	APR 1984
52.228-2	Additional Bond Security	OCT 1997
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-11	Pledges Of Assets	FEB 1992
52.228-14	Irrevocable Letter of Credit	DEC 1999
52.229-3	Federal, State And Local Taxes	APR 2003
52.232-16	Progress Payments	APR 2003
52.232-17	Interest	JUN 1996
52.232-23	Assignment Of Claims	JAN 1986
52.232-24	Prohibition of Assignment of Claims	JAN 1986
52.232-33	Payment by Electronic Funds TransferCentral Contractor	OCT 2003
	Registration	
52.233-1	Disputes	JUL 2002
52.233-3	Protest After Award	AUG 1996
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment,	APR 1984
	Utilities, and Improvements	
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-14	Availability and Use of Utility Services	APR 1984
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 97) - Alternate I	APR 1984
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.244-2	Subcontracts	AUG 1998
52.245-1	Property Records	APR 1984
52.246-12	Inspection of Construction	AUG 1996
52.248-3	Value Engineering-Construction	FEB 2000
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Sep 1996) - Alternate I	SEP 1996
52.253-1	Computer Generated Forms	JAN 1991
252.203-7002	Display Of DOD Hotline Poster	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	REQUIRED CENTRAL CONTRACT REGISTRATION	FEB 1999

252.209-7000	Acquisition From Subcontractors Subject To On-Site	NOV 1995
	Inspection Under The Intermediate Range Nuclear Forces	
	(INF) Treaty	
252.209-7001	Disclosure of Ownership or Control by the Government of a	MAR 1998
	Terrorist Country	
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7001	Buy American Act And Balance Of Payments Program	APR 2003
252.227-7033	Rights in Shop Drawings	APR 1966
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7023	Transportation of Supplies by Sea	MAY 2002
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

### CLAUSES INCORPORATED BY FULL TEXT

### 52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

- (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$100.00 per day for each calendar day of delay until the work is completed or accepted.
- (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

# 52.225-5 TRADE AGREEMENTS (JAN 2004)

(a) Definitions. As used in this clause.

Caribbean Basin country means any of the following countries: Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago.

Caribbean Basin country end product means an article that--

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of an article that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to the article, provided that the value of those incidental services does not exceed that of the article itself. The term excludes products that are excluded from duty-free treatment for Caribbean countries under 19 U.S.C. 2703(b), which presently are--
- (i) Textiles and apparel articles that are subject to textile agreements;

- (ii) Footwear, handbags, luggage, flat goods, work gloves, and leather wearing apparel not designated as eligible articles for the purpose of the Generalized System of Preferences under Title V of the Trade Act of 1974;
- (iii) Tuna, prepared or preserved in any manner in airtight containers;
- (iv) Petroleum, or any product derived from petroleum; and
- (v) Watches and watch parts (including cases, bracelets, and straps) of whatever type including, but not limited to, mechanical, quartz digital, or quartz analog, if such watches or watch parts contain any material that is the product of any country to which the Harmonized Tariff Schedule of the United States (HTSUS) column 2 rates of duty apply.

Designated country means any of the following countries: Aruba, Austria, Bangladesh Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark, Djibouti, Equatorial Guinea.

Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Honduras, Hong Kong, Iceland, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country end product means an article that--

- (1) Is wholly the growth, product, or manufacture of a designated country; or
- (2) In the case of an article that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services, (except transportation services) incidental to the article, provided that the value of those incidental services does not exceed that of the article itself.

End product means supplies delivered under a line item of a Government contract.

Free Trade Agreement country means Canada, Chile, Mexico, or Singapore.

Free Trade Agreement country end product means an article that--

- (1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or
- (2) In the case of an article that consists in whole or in part of materials from another country, has been substantially transformed in an FTA country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to the article, provided that the value of those incidental services does not exceed that of the article itself.

United States means the 50 States, the District of Columbia, and outlying areas.

U.S.-made end product means an article that is mined, produced, or manufactured in the United States or that is substantially transformed in the United States into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed.

- (b) Delivery of end products. The Contracting Officer has determined that the Trade Agreements Act and FTA apply to this acquisition. Unless otherwise specified, these trade agreements apply to all items in the Schedule. The Contractor shall deliver under this contract only U.S.-made, designated country, Caribbean Basin country, or FTA country end products except to the extent that, in its offer, it specified delivery of other end products in the provision entitled "Trade Agreements Certificate."
- (c) United States law will apply to resolve any claim of breach of this contract.

(End of clause)

# 52.225-11 BUY AMERICAN ACT--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JAN 2004)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

# Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a designated country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

Free Trade Agreement country means Canada, Chile, Mexico, or Singapore.

Free Trade Agreement country construction material means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States, the District of Columbia, and outlying areas.

- (b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country and FTA country construction materials.
- (2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.
- (3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: None
- (4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) I	Request for	determination	of inapp	olicability	of the B	Buy A	merican Act.	
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- (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--
- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domest	ic Construction Materia	als Price Compar	rison
Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material			
Domestic construction material			•••••
Item 2:			

Foreign construction material
Domestic construction material

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(e) United States law will apply to resolve any claim of breach of this contract.

(End of clause)

# 52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JAN 2004)

- (a) Definitions. Construction material, designated country construction material, domestic construction material, foreign construction material, and FTA country construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act --Construction Materials under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).
- (b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.
- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.
- (d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country or FTA country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic, designated country, or FTA country construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic, designated country, or FTA country construction material, and the offeror shall be required to furnish such domestic, designated country, or FTA country construction material. An offer based on use of the foreign construction material for which an exception was requested--

- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of provision)

#### 52.228-1 BID GUARANTEE (SEP 1996)

- (a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.
- (b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.-
- (c) The amount of the bid guarantee shall be 20 percent of the bid price or \$500,000, whichever is less.-
- (d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.-
- (e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of clause)

## 52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

### 52.228-15 PERFORMANCE AND PAYMENT BONDS CONSTRUCTION (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

- (b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:
- (1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.
- (2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.
- (3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.
- (ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.
- (c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.
- (d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.
- (e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

## 52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)

- (a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.
- (b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.
- (1) The Contractor's request for progress payments shall include the following substantiation:
- (i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.
- (ii) A listing of the amount included for work performed by each subcontractor under the contract.
- (iii) A listing of the total amount of each subcontract under the contract.
- (iv) A listing of the amounts previously paid to each such subcontractor under the contract.

- (v) Additional supporting data in a form and detail required by the Contracting Officer.
- (2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--
- (i) Consideration is specifically authorized by this contract; and
- (ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.
- (c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract:
- (2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is	s not to be construed as	final acceptance of a	subcontractor's perfe	ormance.
(Name)	_			
(Title)				

- (d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--
- (1) Notify the Contracting Officer of such performance deficiency; and

(Date)

- (2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--
- (i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

- (ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.
- (e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.
- (f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--
- (1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or
- (2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.
- (g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.
- (h) Final payment. The Government shall pay the amount due the Contractor under this contract after-
- (1) Completion and acceptance of all work;
- (2) Presentation of a properly executed voucher; and
- (3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).
- (i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.
- (j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--
- (1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and
- (2) Deducted from the next available payment to the Contractor.

(End of clause)

### 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (OCT 2003)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

- (a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:
- (i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.
- (A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.
- (ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).
- (A) The due date for making such payments is the later of the following two events:
- (1) The 30th day after the designated billing office receives a proper invoice from the Contractor.
- (2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.
- (B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

- (i) Name and address of the Contractor.
- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)
- (iii) Contract number or other authorization for work or services performed (including order number and contract line item number).
- (iv) Description of work or services performed.
- (v) Delivery and payment terms (e.g., discount for prompt payment terms).
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (x) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (xi) Any other information or documentation required by the contract.
- (3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.
- (iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

- (4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
- (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
- (6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
- (A) The Government owes an interest penalty of \$1 or more;
- (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
- (C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.
- (ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
- (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

- (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.
- (b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
- (c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:
- (1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.
- (2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--
- (i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and
- (ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:
- (i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and
- (ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.
- (d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--
- (1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;
- (2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and
- (3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--
- (i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and
- (ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

- (e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--
- (1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;
- (2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;
- (3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;
- (4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--
- (i) Make such payment within--
- (A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or
- (B) Seven days after the Contractor recovers such funds from the Government; or
- (ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;
- (5) Notice to Contracting Officer. Notify the Contracting Officer upon-
- (i) Reduction of the amount of any subsequent certified application for payment; or
- (ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--
- (A) The amounts withheld under paragraph (e)(1) of this clause; and
- (B) The dates that such withholding began and ended; and
- (6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--
- (i) The day the identified subcontractor performance deficiency is corrected; or
- (ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.
- (f) Third-party deficiency reports--(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments

otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause-

- (i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and
- (ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.
- (2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--
- (i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or
- (ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts DisputesAct of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--
- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.
- (h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.
- (i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.
- (j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.
- (k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.
- (l) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

#### 52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

- (a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.
- (b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

### 52.243-4 CHANGES (AUG 1987)

- (a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--
- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.
- (b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating
- (1) the date, circumstances, and source of the order and
- (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an

adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after
- (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.
- (f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

## 52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.
- (b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.
- (c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--
- (1) The Contractor's failure to conform to contract requirements; or
- (2) Any defect of equipment, material, workmanship, or design furnished.
- (d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.
- (e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
- (f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--
- (1) Obtain all warranties that would be given in normal commercial practice;

- (2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and
- (3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.
- (h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.
- (i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.
- (j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

## 52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

- (a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.
- (b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include
- (i) acts of God or of the public enemy,
- (ii) acts of the Government in either its sovereign or contractual capacity,
- (iii) acts of another Contractor in the performance of a contract with the Government,
- (iv) fires,
- (v) floods,
- (vi) epidemics,
- (vii) quarantine restrictions,
- (viii) strikes,

- (ix) freight embargoes,
- (x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
- (2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these address(es):

www.arnet.gov/far or http://farsite.hill.af.mil

(End of clause)

# 252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

- (a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.
- (b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

(End of clause)

# 252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

- (1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.
- (2) "Toxic or hazardous materials" means:
- (i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);
- (ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or
- (iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.
- (b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

#### 252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

- (a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.
- (b) The price breakdown --
- (1) Must include sufficient detail to permit an analysis of profit, and of all costs for --
- (i) Material:
- (ii) Labor;
- (iii) Equipment;
- (iv) Subcontracts; and
- (v) Overhead; and
- (2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.
- (c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.
- (d) The Contractor's proposal shall include a justification for any time extension proposed.

### 252.236-7001 CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (AUG 2000)

- (a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.
- (b) The Contractor shall--
- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.
- (c) In general--
- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.
- (d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.
- (e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title File Drawing No.

Paint (Coat) and Repair Water Storage Tank 5200 F5-00011-6J See Applicable Sections

(End of clause)

## Section K - Representations, Certifications and Other Statements of Offerors

#### CLAUSES INCORPORATED BY REFERENCE

52.203-11	Certification And Disclosure Regarding Payments To	APR 1991
	Influence Certain Federal Transactions	
52.214-18	Preparation of Bids-Construction	APR 1984
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
52.219-21	Small Business Size Representation For Targeted Industry	MAY 1999
	Categories Under The Small Business Competitiveness	
	Demonstration Program	

#### CLAUSES INCORPORATED BY FULL TEXT

#### 52.000-4023 PRE-AWARD INFORMATION

The Government reserves the right, prior to making an award, to conduct a pre-award survey of the prospective contractors in order to determine that the contractors can meet the minimum standards for responsible contractors as defined in Federal Acquisition Regulation (FAR) 9.106. The pre-award survey may include, but will not necessarily be limited to the following factors:

- Financial Resources such as sufficient working capital to permit performance under the contract for a period of sixty (60) days after the effective date of the contract before reimbursement by the Government;
- Ability to comply with required schedules;
- 54 Past record of integrity;
- 55 Past record of performance; and
- Ability to meet other qualifications and eligibility requirement to receive and award of a contract.
- A on-site inspection may be conducted of the facility of the apparent successful bidder (s) offeror(s) prior to contract award for specifications compliance.

A Pre-Award survey may be conducted in order to determine contractor responsibility. Please provide three (3) performance references and one (1) financial reference in the spaces provided below. The performance references can consist of companies for which you have recently performed work. References must be of comparable magnitude and similar in nature to the work required under this solicitation. The financial reference should be your financial institution.

### Three Performance References:

Name:	<del></del>
Address:	
Point of Contact:	
Phone:	
Contract Number:	
Amount:	
Description:	
-	

Name: Address: Point of Contact: Phone: Contract Number: Amount: Description:  Name: Address: Point of Contact: Phone: Contract Number: Amount: Description:  Secription:  Thinancial Reference:  Name: Address: Point of Contact: Phone: Contract Number: Amount: Description:  Secription:  Thinancial Reference:  Name: Address: POC: Phone: Account Number:  Account Number:  152.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)  (a) The offeror certifies that  (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, or agreement with any other offeror or competitor relating to -  (i) Those prices,  (ii) The methods of factors used to calculate the prices offered:		
Address: Point of Contact: Phone: Contract Number: Amount: Description:  Name: Address: Point of Contact: Phone: Costract Number: Address: Point of Contact: Phone: Contract Number: Address: Point of Contact: Phone: Contract Number: Amount: Description:  Financial Reference:  Name: Address: POC: Phone: Account Number:  52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)  (a) The offeror certifies that —  (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to —  (i) Those prices, (ii) The intention to submit an offer, or	Nar	me•
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Phone: Contract Number: Amount: Description:  Name: Address: Point of Contact: Phone: Contract Number: Amount: Description:  Financial Reference:  Name: Address: POC: Phone: Account Number:  Account Number:  Account Number:  10. The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to —  (i) Those prices, (ii) The intention to submit an offer, or	Poi	nt of Contact:
Contract Number: Amount: Description:    Name:		
Description:    Name:	Con	ntract Number:
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52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)  (a) The offeror certifies that  (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –  (i) Those prices,  (ii) The intention to submit an offer, or		
<ul> <li>(a) The offeror certifies that</li> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to -</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>	Acc	count Number:
<ul> <li>(a) The offeror certifies that</li> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to -</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>		
<ul> <li>(a) The offeror certifies that</li> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to -</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>		
<ul> <li>(a) The offeror certifies that</li> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to -</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>	52 202 2	CEDITIEICATE OF INDEDENDENT DDICE DETERMINATION (ADD 1005)
<ul> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>	32.203-2	CERTIFICATE OF INDEFENDENT PRICE DETERMINATION (APR 1963)
<ul> <li>(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –</li> <li>(i) Those prices,</li> <li>(ii) The intention to submit an offer, or</li> </ul>	(a) The offer	var cartifies that
any consultation, communication, or agreement with any other offeror or competitor relating to –  (i) Those prices,  (ii) The intention to submit an offer, or	(a) The one	of certifies that
any consultation, communication, or agreement with any other offeror or competitor relating to –  (i) Those prices,  (ii) The intention to submit an offer, or	(1) The price	es in this offer have been arrived at independently, without, for the purpose of restricting competition
<ul><li>(i) Those prices,</li><li>(ii) The intention to submit an offer, or</li></ul>		
(ii) The intention to submit an offer, or	any consulta	tion, communication, or agreement with any other orier of competitor relating to –
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(iii) The methods of factors used to calculate the prices offered:	(II) The lines	ition to submit an orier, or
VIII EIN HAARMA OLI AADIS IIMALIO VAIMIAID IID DINAS OHGIGU.	(iii) The mot	hads of factors used to calculate the prices offered:
(m) The memous of metors diseased in private officers	(m) The met	nous of factors used to calculate the prices officied.
(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to	(2) The price	es in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly to

any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the

case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.			
(b) Each signature on the offer is considered to be a certification by the signatory that the signatory			
(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or			
(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provison (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);			
(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and			
(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.			
(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.			
(End of clause)			
52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)			
52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)  (a) Definitions.			
<ul><li>(a) Definitions.</li><li>"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of</li></ul>			
(a) Definitions.  "Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.  "Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a			

(d) Taxpayer Identification Number (TIN).

\_\_\_ TIN:.\_\_\_\_

TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);
Government entity (Federal, State, or local);
Foreign government;
International organization per 26 CFR 1.6049-4;
Other
(f) Common parent.
Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
Name and TIN of common parent:
Name
TIN
(End of provision)
52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)
(a)(1) The Offeror certifies, to the best of its knowledge and belief, that-
(i) The Offeror and/or any of its Principals-
(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

- (B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
- (C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) The Offeror has ( ) has not ( ), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

## 52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 238320.
- (2) The small business size standard is \$12M.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) Representations. (1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124.1002.
(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.
(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it $(\ )$ is, $(\ )$ is not a veteran-owned small business concern.
(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.
(6) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that
(i) It ( ) is, ( ) is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and
(ii) It ( ) is, ( ) is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:
(c) Definitions. As used in this provision

(1) Means a small business concern-

Service-disabled veteran-owned small business concern--

- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

- (1) That is at least 51 percent owned by one or more women; in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Notice.
- (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.
- (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall-
- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

## 52.219-21 SMALL BUSINESS SIZE REPRESENTATION FOR TARGETED INDUSTRY CATEGORIES UNDER THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (MAY 1999)

(Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues
50 or fewer \$1 million or less
51 - 100 \$1,000,001 - \$2 million
101 - 250 \$2,000,001 - \$3.5 million
251 - 500 \$3,500,001 - \$5 million
501 - 750 \$5,000,001 - \$10 million

751 - 1,000 \$10,000,001 - \$17 million
Over 1,000 Over \$17 million
(End of provision)
52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)
The offeror represents that
(a) ( ) It has, ( ) has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
(b) ( ) It has, ( ) has not, filed all required compliance reports; and
(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.
(End of provision)
52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)
(a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.
(b) By signing this offer, the offeror certifies that
(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or
(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)
( ) (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;
( ) (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. $11023(b)(1)(A)$ ;
( ) (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
( ) (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
(A) Major group code 10 (except 1011, 1081, and 1094.

- (B) Major group code 12 (except 1241).
- (C) Major group codes 20 through 39.
- (D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
- (E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or
- ( ) (v) The facility is not located within the United States or its outlying areas.

(End of clause)

#### 252.204-7001 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING (AUG 1999)

- (a) The offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter "CAGE" before the number.
- (b) If the offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Information Service (DLIS). The Contracting Officer will--
- (1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of a Commercial and Government Entity (CAGE) Code;
- (2) Complete section A and forward the form to DLIS; and
- (3) Notify the Contractor of its assigned CAGE code.
- (c) Do not delay submission of the offer pending receipt of a CAGE code.

(End of provision)

# 252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

- (3) "Significant interest" means --
- (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
- (ii) Holding a management position in the firm, such as a director or officer;
- (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
- (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
- (v) Holding 50 percent or more of the indebtness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

- (1) Identification of each government holding a significant interest; and
- (2) A description of the significant interest held by each government.

(End of provision)

## 252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

- (a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.
- (b) Representation. The Offeror represents that it:
- \_\_\_\_ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- \_\_\_\_ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- (c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

## Section L - Instructions, Conditions and Notices to Bidders

#### CLAUSES INCORPORATED BY REFERENCE

52.214-3	Amendments To Invitations For Bids	DEC 1989
52.214-4	False Statements In Bids	APR 1984
52.214-5	Submission Of Bids	MAR 1997
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999

#### CLAUSES INCORPORATED BY FULL TEXT

## 52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (OCT 2003)

- (a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same parent concern.
- (b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.
- (1) An offeror may obtain a DUNS number--
- (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com; or
- (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.
- (2) The offeror should be prepared to provide the following information:
- (i) Company legal business name.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company physical street address, city, state and Zip Code.
- (iv) Company mailing address, city, state and Zip Code (if separate from physical).
- (v) Company telephone number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).

(End of provision)

### 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm-Fixed Priced contract resulting from this solicitation.

(End of clause)

## 52.233-2 SERVICE OF PROTEST (AUG 1996)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Army Contracting Agency (ACA), Directorate of Contracting, Building 802, Fort Riley, KS 66442-0248.
- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

## 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) – ALTERNATE I (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.
- (b) An organized site visit has been scheduled for--

March 5, 2004 10:00 AM (CST)

(c) Participants will meet at--

Directorate of Contracting Building 802, Marshall Drive Fort Riley, KS 66442-0248

POC: Willie Delatorre, (785) 239-0479 or mailto: mailto:wilfredo.delatorre@us.army.mil

(End of provision)

## 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is

cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at these address(es):

www.arnet.gov/far or farsit.hill.af.mil

(End of provision

## Section M - Evaluation Factors for Award

## ADDITIONAL INFORMATION

Failure to provide a price for each Line Item specified in the Solicitation shall render the entire bid as nonresponsive.

## CLAUSES INCORPORATED BY FULL TEXT

## 52.0000-4998 RESPONSIBLE BIDDER

A single award will be made to the responsible bidder submitting the lowest responsive bid in accordance with requirements and provisions herein.